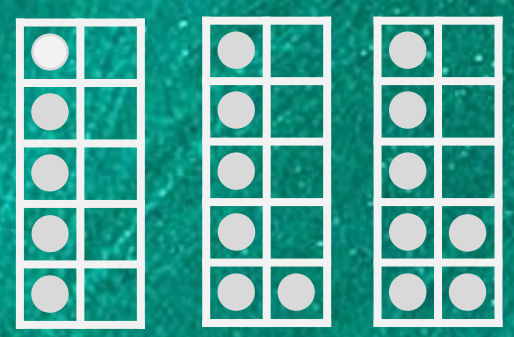
I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES



GARETH METCALFE

Available as PowerPoint and PDF from www.iseemaths.com

I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES

Task 1: Making 3-digit numbers

Task 2: Making 4-digit numbers

Task 3: Numbers in columns

Task 4: 1-100 number line

Task 5: 1-1000 number line

Task 6: Patterns in sequences

Task 7: Count back through 0

Task 8: Rounding to 10 and 100

Task 9: Rounding money

Task 10: Roman Numerals

Task 11: Consecutive numbers

Task 12: Make 24

Task 13: Number sentences

Task 14: = and > signs

Task 15: Bordering 10

Task 16: Positioning digits to add

Task 17: Positioning digits to subtract

Task 18: Sum and difference

Task 19: More boys or girls?

Task 20: Part/whole word questions

I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES

Task 21: Change at the shop

Task 22: × + number sentences

Task 23: Area models

Task 24: Largest product

Task 25: 2-digit product

Task 26: Shapes with matchsticks

Task 27: Division in context

Task 28: Different quotients

Task 29: Finding factors

Task 30: Venn diagrams

Task 31: Different answers

Task 32: Questions in context

Task 33: Combinations

Task 34: Estimating fractions

Task 35: Fraction of a shape

Task 36: Parts and the whole

Task 37: Fractions on a line

Task 38: Sharing contexts

Task 39: Fraction of a number

Task 40: Balancing scales

I SEE PROBLEM-SOLVING – LKS2

WORKED EXAMPLES

Task 41: Measures of time

Task 42: Reading clocks

Task 43: Combinations of change

Task 44: Comparing angles

Task 45: Area and perimeter

Task 46: Shape properties

Task 47: Building shapes

Task 48: Lines of symmetry

Task 49: Coordinate points

Task 50: After-school clubs

Task 51: Different graph types

Task 52: Making judgements

Task 53: Train timetables

Task 54: Comparing teams

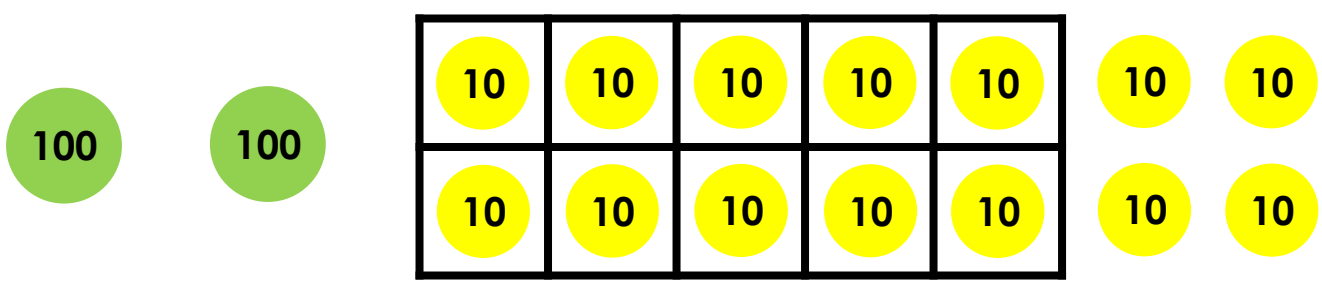
Task 1: Making 3-digit numbers

340

Task 1: Making 3-digit numbers

340

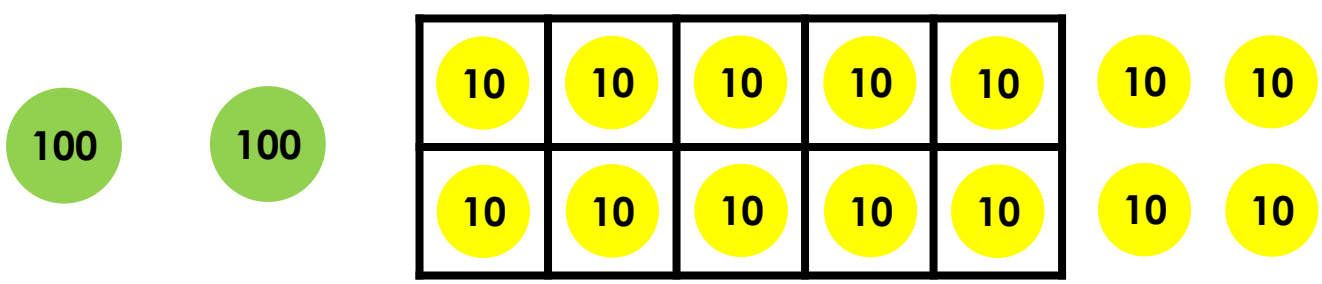
340



Task 1: Making 3-digit numbers

340

340



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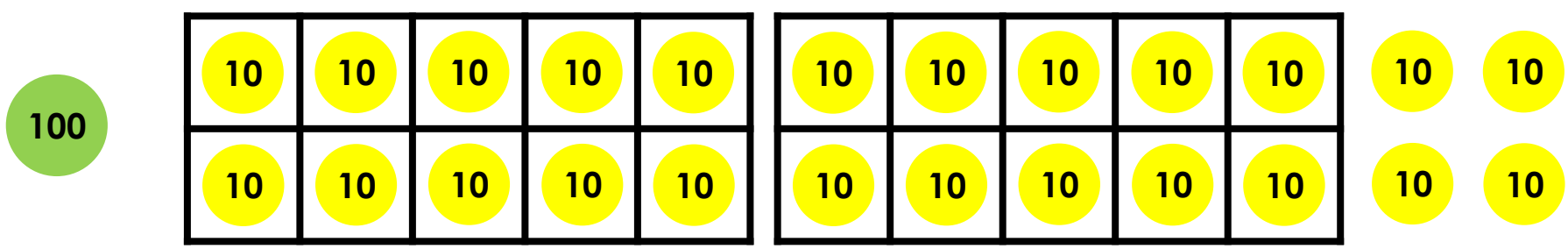
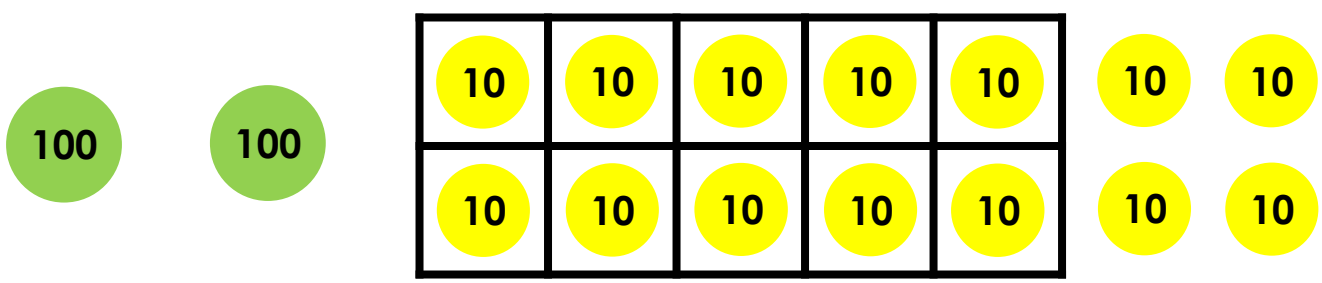


Task 1: Making 3-digit numbers

340

340



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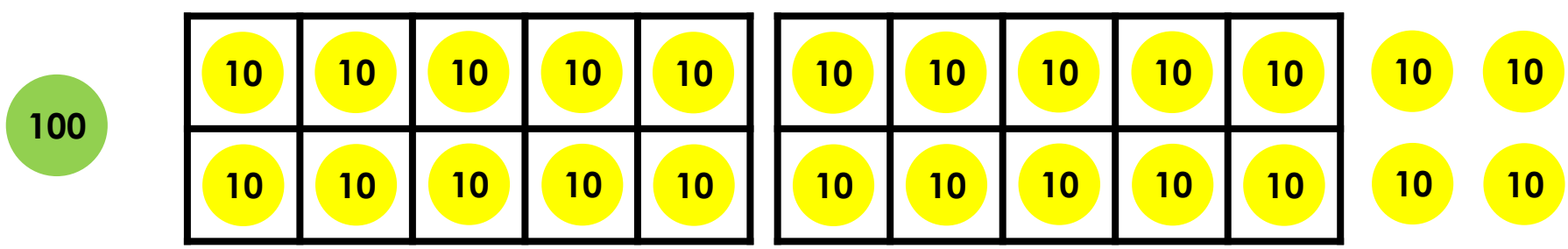

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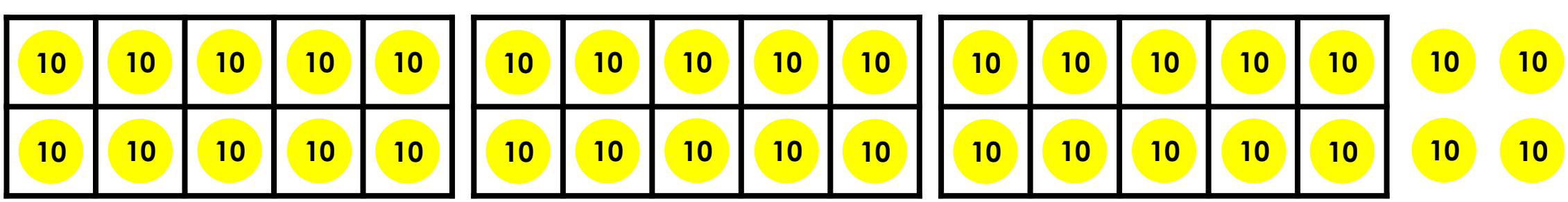


Task 2: Making 4-digit numbers

Example Answers

2150

2×1000

1×100

5×10

Task 2: Making 4-digit numbers

Example Answers

2150

2 × 1000

1 × 100

5 × 10

2150

1 × 1000

11 × 100

5 × 10

Task 2: Making 4-digit numbers

Example Answers

2150

2 × 1000

1 × 100

5 × 10

2150

21 × 100

5 × 10

2150

1 × 1000

11 × 100

5 × 10

Task 2: Making 4-digit numbers

Example Answers

2150

2×1000

1×100

5×10

2150

1×1000

11×100

5×10

2150

21×100

5×10

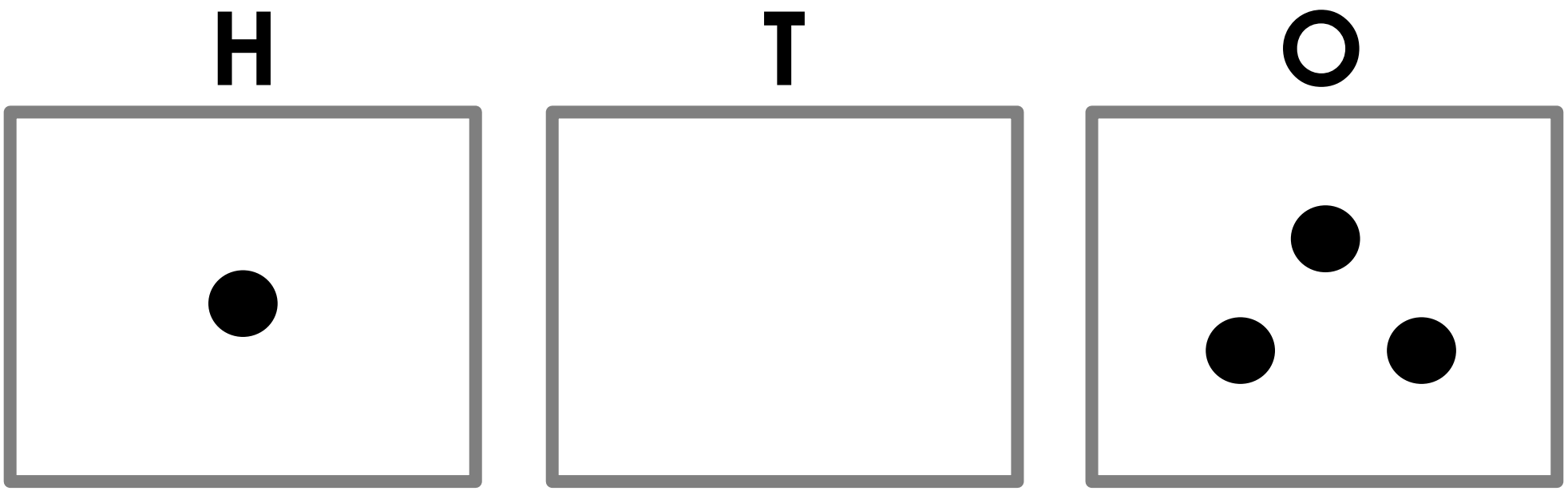
2150

215×10

Task 3: Numbers in columns

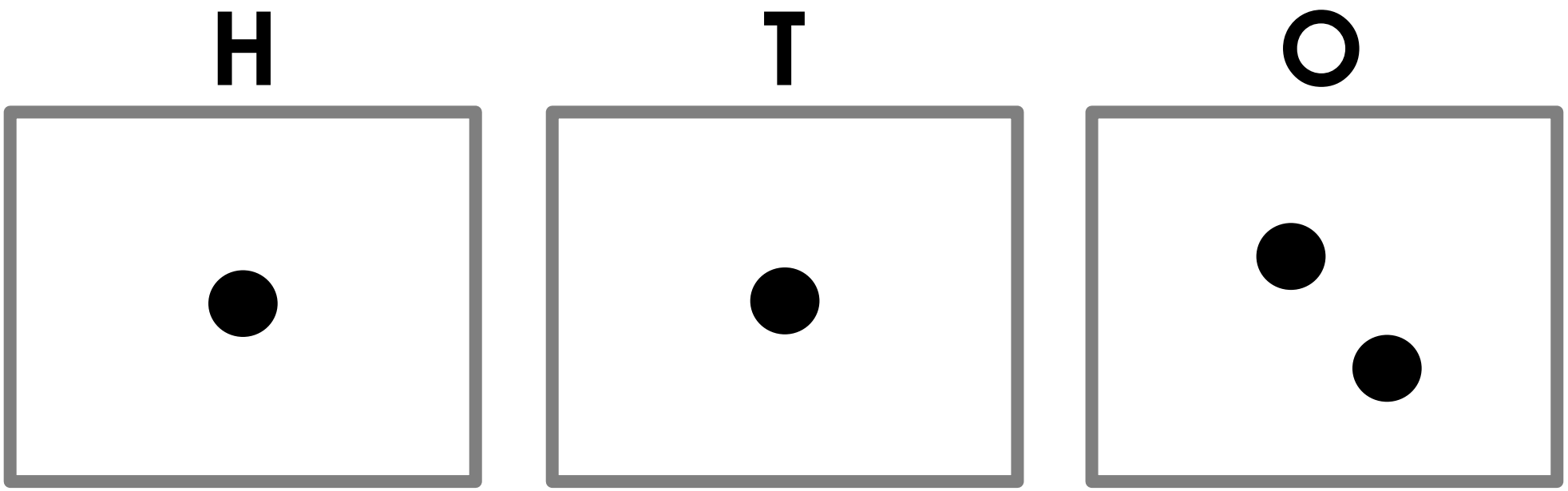
H	T	O

Task 3: Numbers in columns



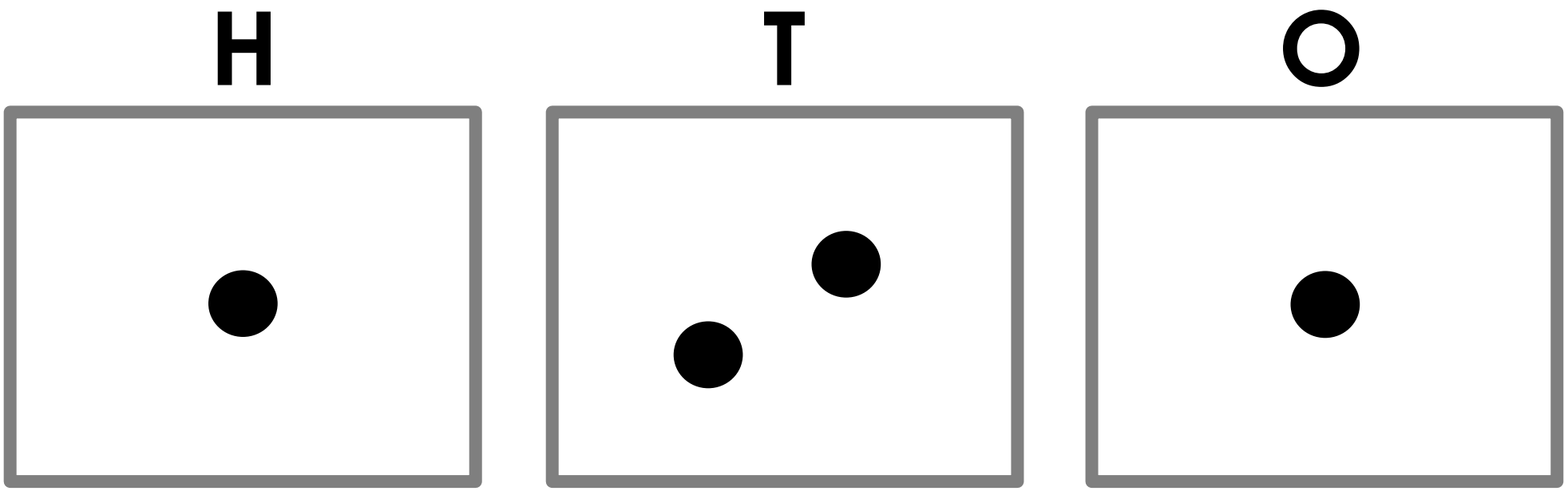
103

Task 3: Numbers in columns



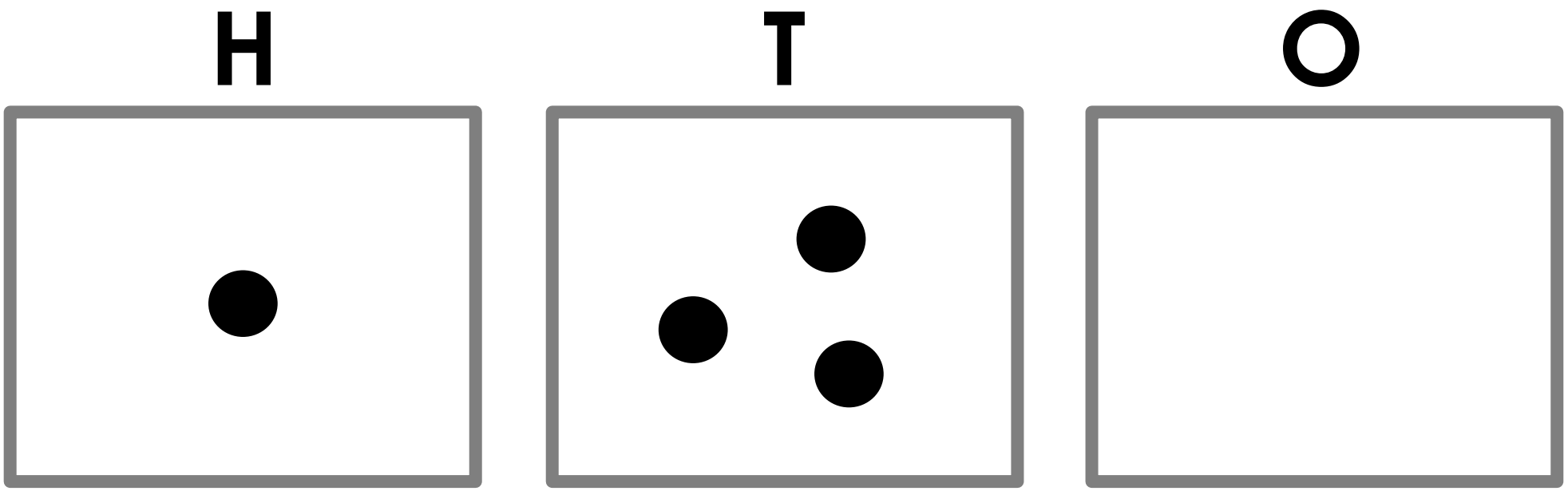
103 **112**

Task 3: Numbers in columns



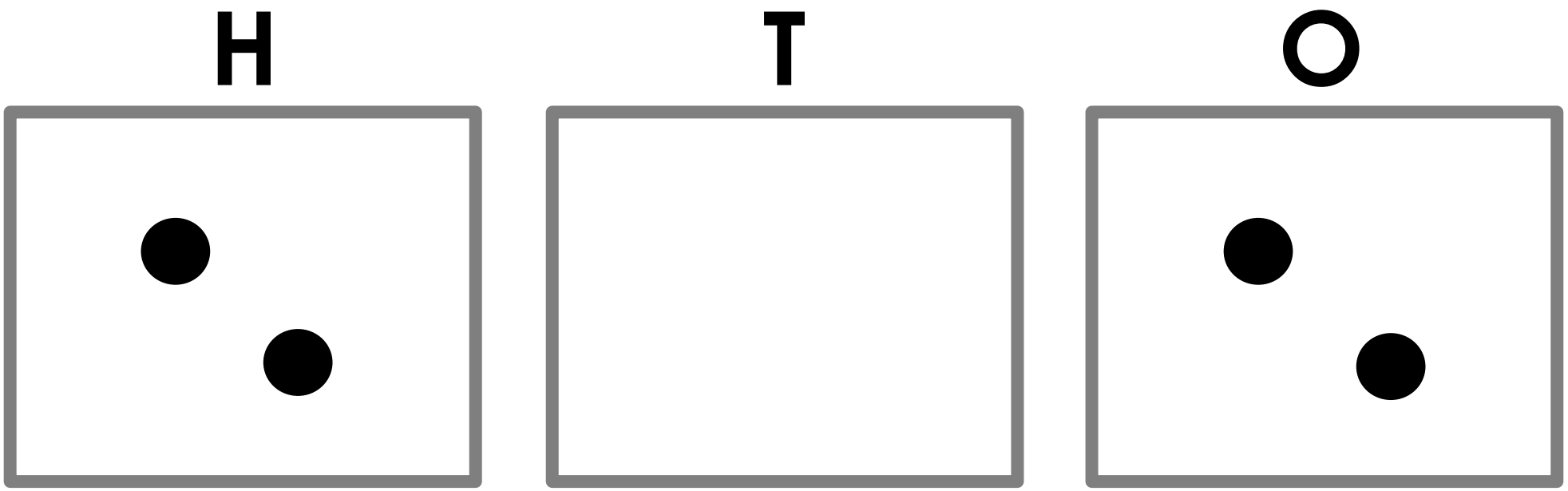
103 **112** **121**

Task 3: Numbers in columns



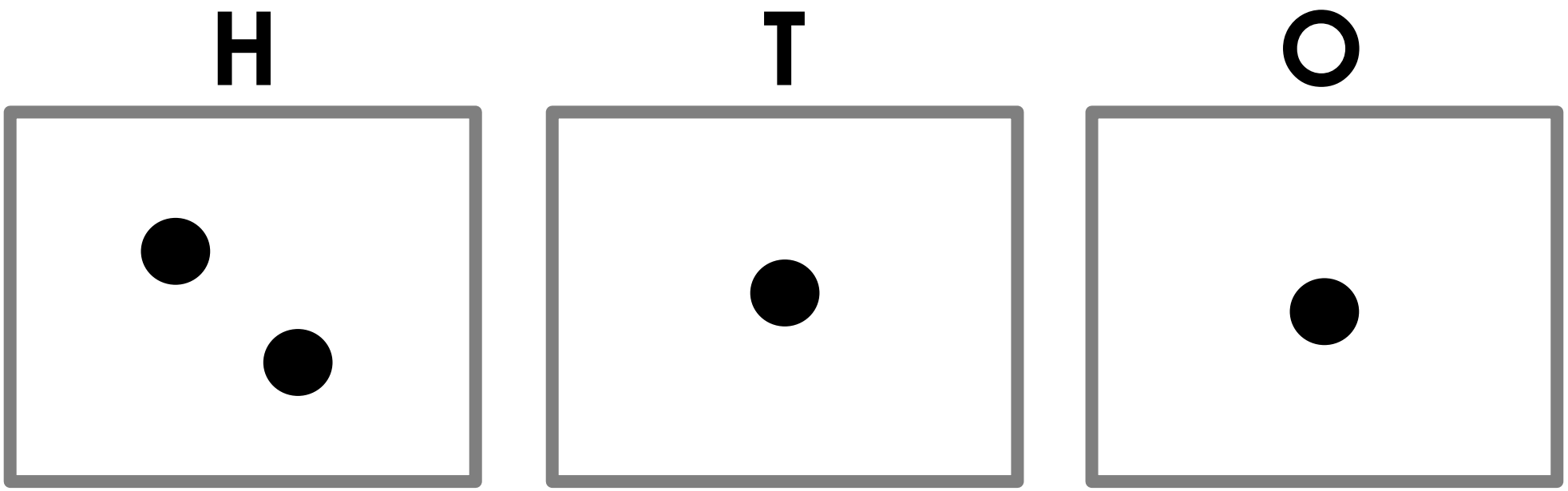
103 **112** **121** **130**

Task 3: Numbers in columns



103 **112** **121** **130** **202**

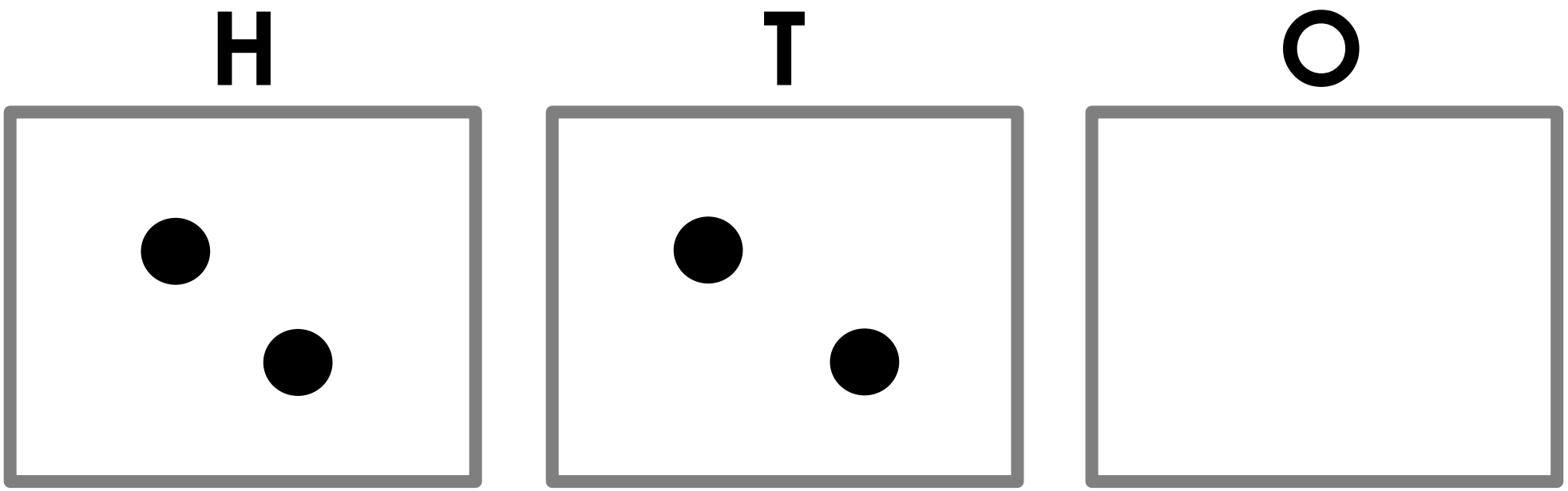
Task 3: Numbers in columns



103 **112** **121** **130** **202**

211

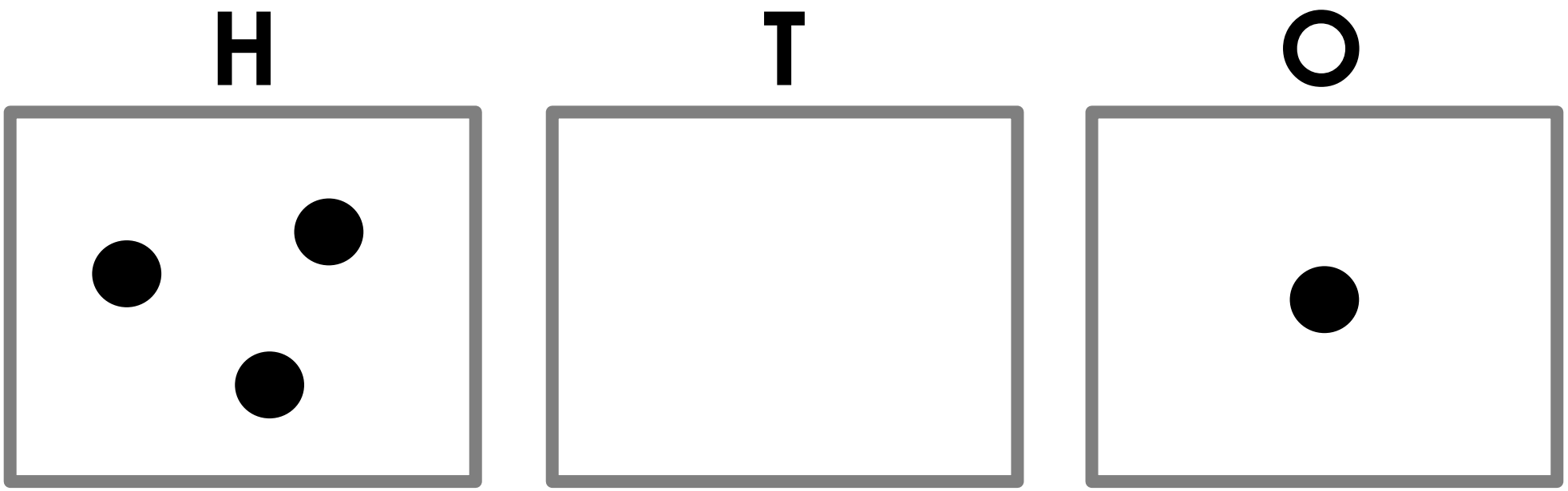
Task 3: Numbers in columns



103 **112** **121** **130** **202**

211 **220**

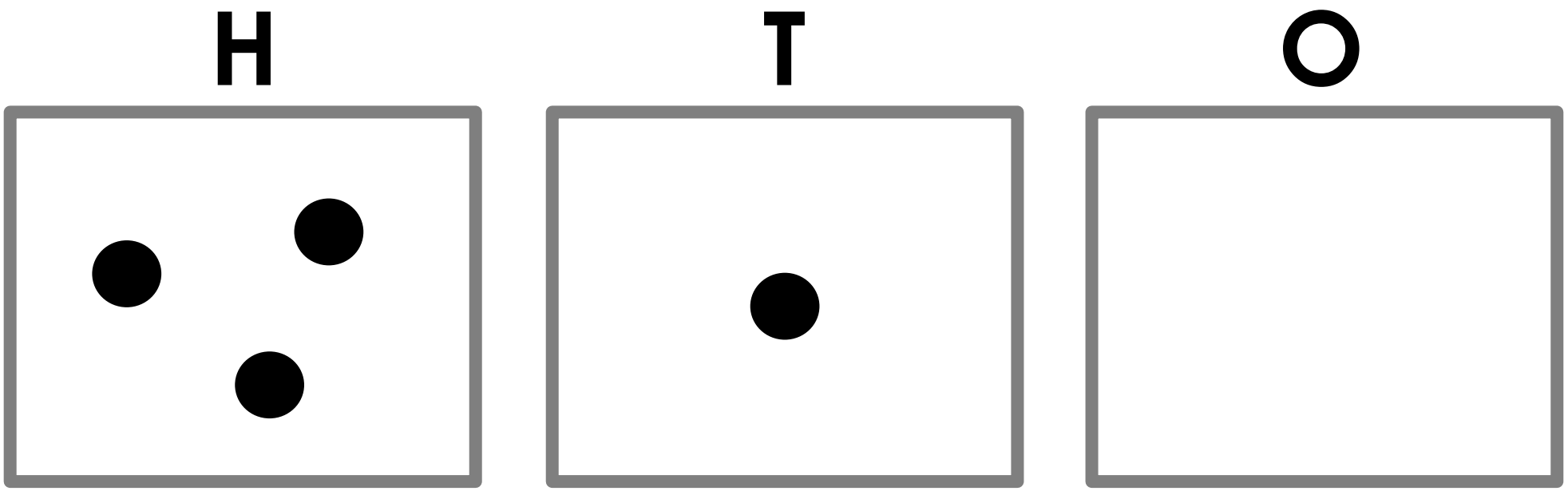
Task 3: Numbers in columns



103 **112** **121** **130** **202**

211 **220** **301**

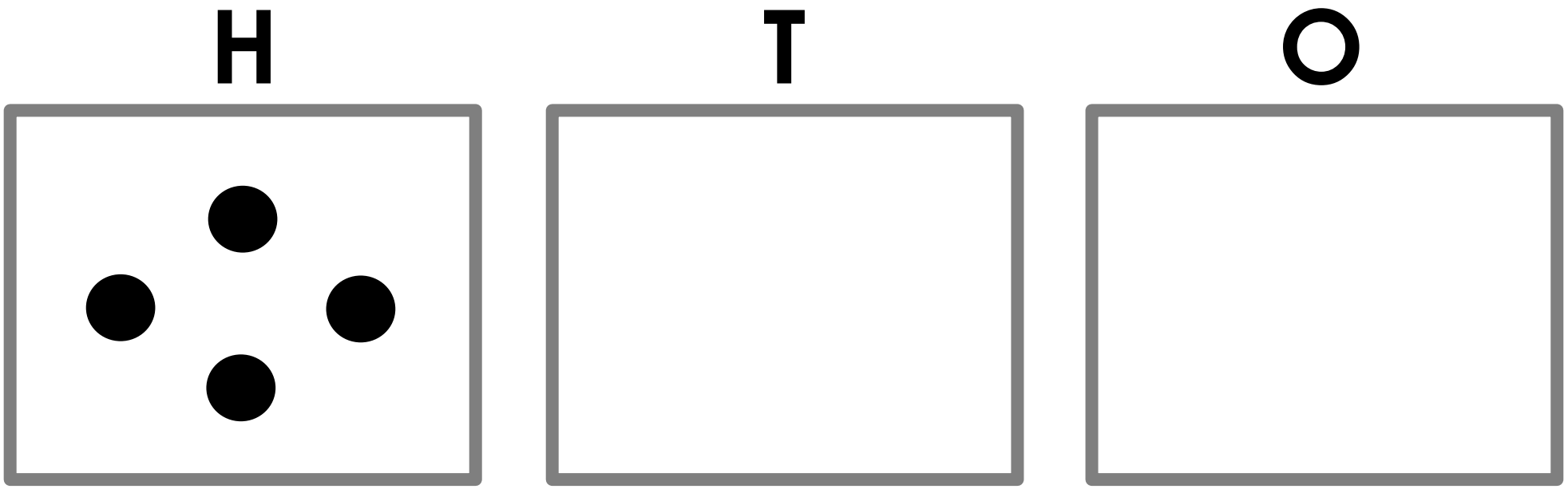
Task 3: Numbers in columns



103 **112** **121** **130** **202**

211 **220** **301** **310**

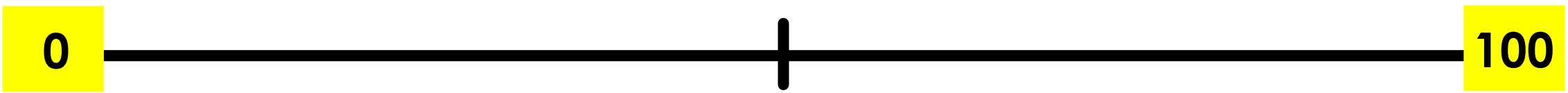
Task 3: Numbers in columns



103	112	121	130	202
211	220	301	310	400

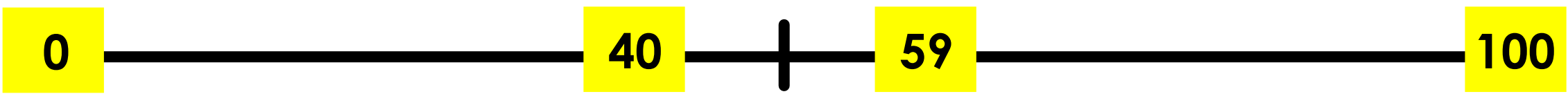
Task 4: 0-100 number line

Task 4: 0-100 number line



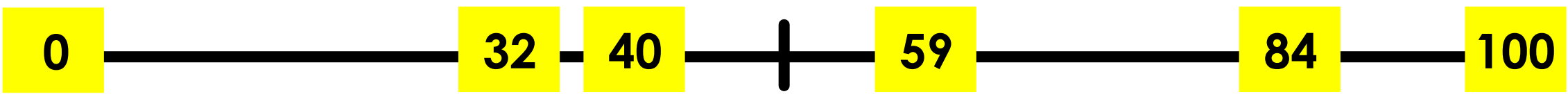
50 is half-way.

Task 4: 0-100 number line

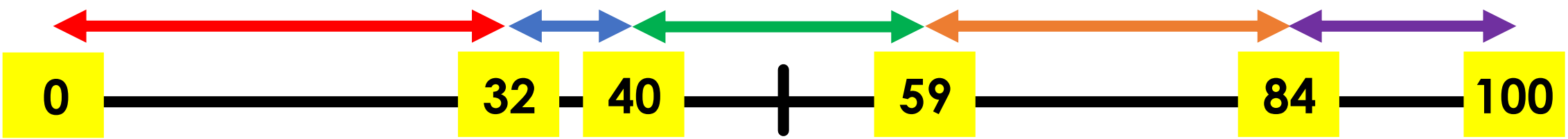


40 is less than half-way, 59 is more than half-way.

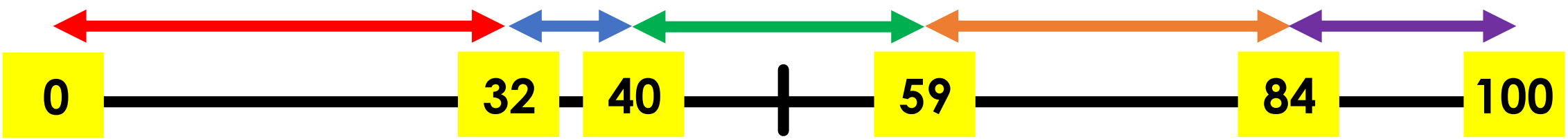
Task 4: 0-100 number line



Task 4: 0-100 number line

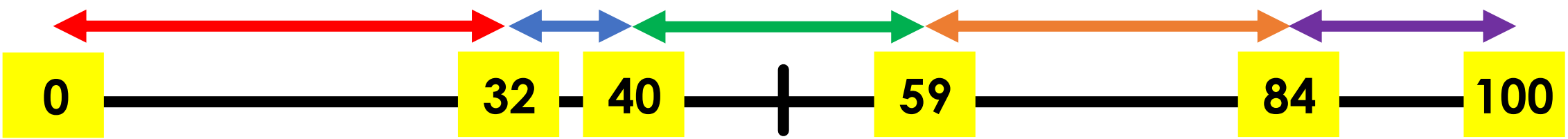


Task 4: 0-100 number line



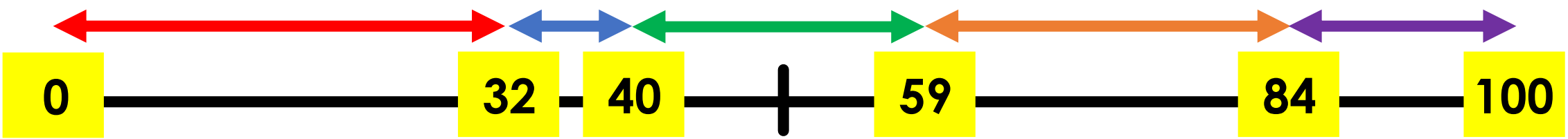
The red arrow (0→32) is double the length of the purple arrow (84→100).

Task 4: 0-100 number line



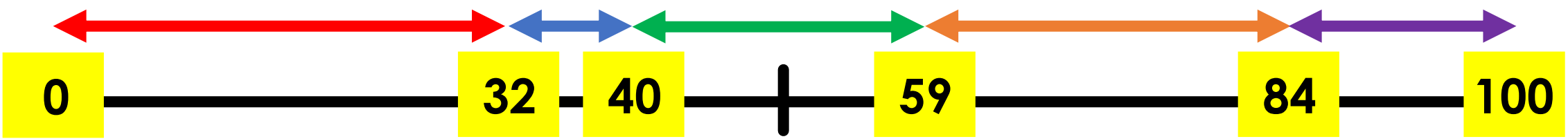
The green arrow (40→59) is slightly longer than the purple arrow (84→100).

Task 4: 0-100 number line



The red arrow (0→32) is four times longer than the blue arrow (32→40).

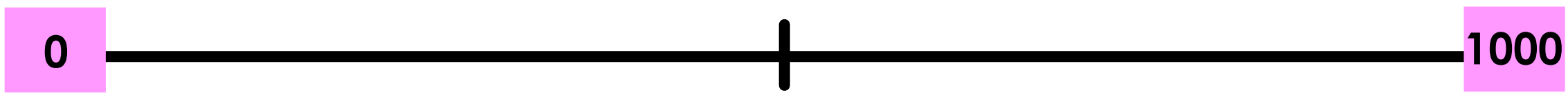
Task 4: 0-100 number line



Smallest to largest: blue (32→40), purple (84→100), green (40→59), orange (59→84), red (0→32).

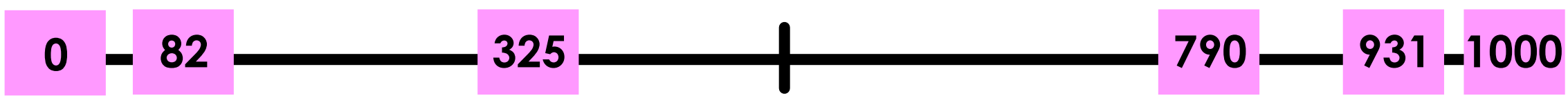
Task 5: 0-1000 number line

Task 5: 0-1000 number line

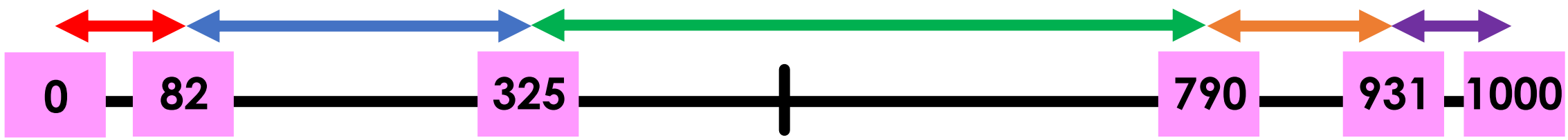


500 is half-way.

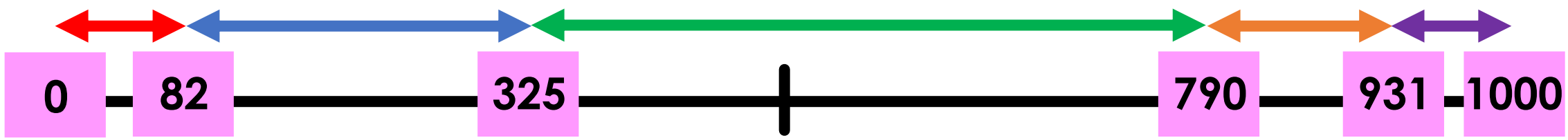
Task 5: 0-1000 number line



Task 5: 0-1000 number line

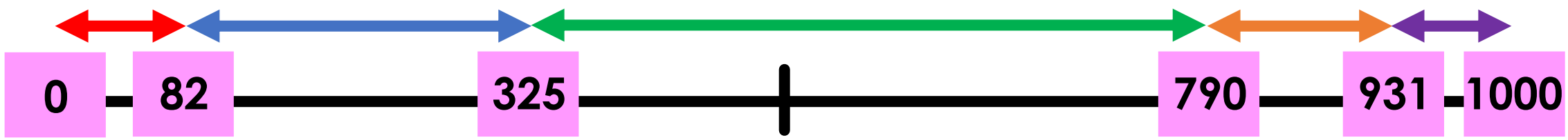


Task 5: 0-1000 number line



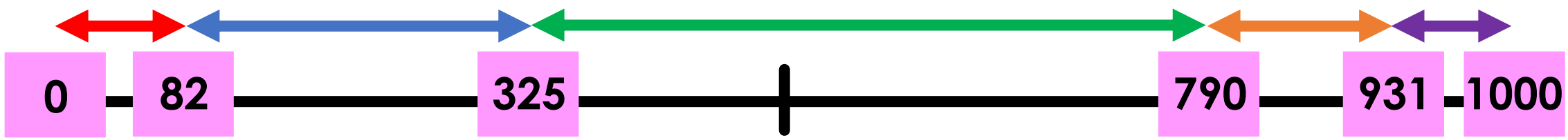
The purple arrow (931→1000) is approximately half the length of the orange arrow (790→931).

Task 5: 0-1000 number line



The blue arrow (82→325) is approximately three times longer than the red arrow (0→82).

Task 5: 0-1000 number line



Smallest to largest: purple (931→1000), red (0→82), orange (790→931), blue (82→325), green (325→790).

Task 6: Patterns in sequences

1	×		=		
2	×		=		
3	×		=	1	
4	×		=		
5	×		=		0
6	×		=		
7	×		=	2	
8	×		=	3	
9	×		=		
10	×		=		0

Task 6: Patterns in sequences

1	×		=		
2	×		=		
3	×		=	1	
4	×		=		
5	×		=		0
6	×		=		
7	×		=	2	
8	×		=	3	
9	×		=		
10	×		=		0

Must be even number: when multiplied by 5 even numbers end in 0.

Task 6: Patterns in sequences

1	×		=		
2	×		=		
3	×		=	1	
4	×		=		
5	×		=		0
6	×		=		
7	×		=	2	
8	×		=	3	
9	×		=		
10	×		=		0

First 2-digit number here: only times table that has this is 4 × table.

Must be even number: when multiplied by 5 even numbers end in 0.

Task 6: Patterns in sequences

1 ×	4	=		4
2 ×	4	=		8
3 ×	4	=	1	2
4 ×	4	=	1	6
5 ×	4	=	2	0
6 ×	4	=	2	4
7 ×	4	=	2	8
8 ×	4	=	3	2
9 ×	4	=	3	6
10 ×	4	=	4	0

First 2-digit number here: only times table that has this is 4 × table.

Must be even number: when multiplied by 5 even numbers end in 0.

Task 6: Patterns in sequences

1	×		=			
2	×		=	1		
3	×		=			8
4	×		=			
5	×		=			0
6	×		=			
7	×		=			2
8	×		=			
9	×		=			4
10	×		=			

Task 6: Patterns in sequences

1	×		=		
2	×		=	1	
3	×		=		8
4	×		=		
5	×		=		0
6	×		=		
7	×		=		2
8	×		=		
9	×		=		4
10	×		=		

Must be even number: when multiplied by 5 even numbers end in 0.

Task 6: Patterns in sequences

1	×		=		
2	×		=	1	
3	×		=		8
4	×		=		
5	×		=		0
6	×		=		
7	×		=		2
8	×		=		
9	×		=		4
10	×		=		

First 2-digit number here: true for 5→9 times tables.

Must be even number: when multiplied by 5 even numbers end in 0.

Task 6: Patterns in sequences

1	×		=		
2	×		=	1	
3	×		=		8
4	×		=		
5	×		=		0
6	×		=		
7	×		=		2
8	×		=		
9	×		=		4
10	×		=		

First 2-digit number here: true for 5→9 times tables.

Must be even number: when multiplied by 5 even numbers end in 0.

To have these ones values, this must be the 6 × table.

Task 6: Patterns in sequences

1 ×	6	=		6
2 ×	6	=	1	2
3 ×	6	=	1	8
4 ×	6	=	2	4
5 ×	6	=	3	0
6 ×	6	=	3	6
7 ×	6	=	4	2
8 ×	6	=	4	8
9 ×	6	=	5	4
10 ×	6	=	6	0

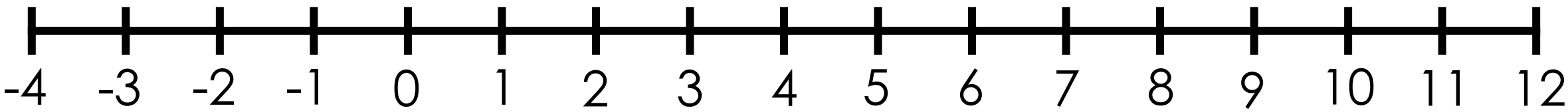
First 2-digit number here: true for 5→9 times tables.

Must be even number: when multiplied by 5 even numbers end in 0.

To have these ones values, this must be the 6 × table.

Task 7: Count back through 0

Example A



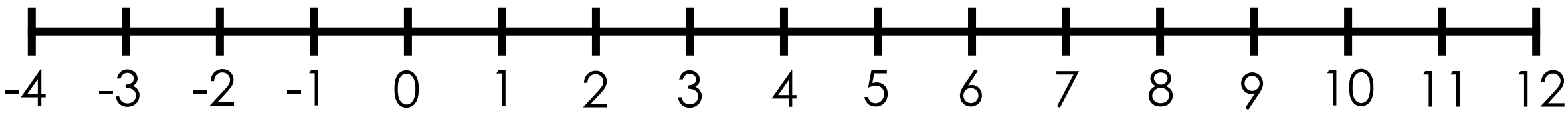
Start counting from ☐

Count back in steps of ☐

The first negative number is ☐

Task 7: Count back through 0

Example A



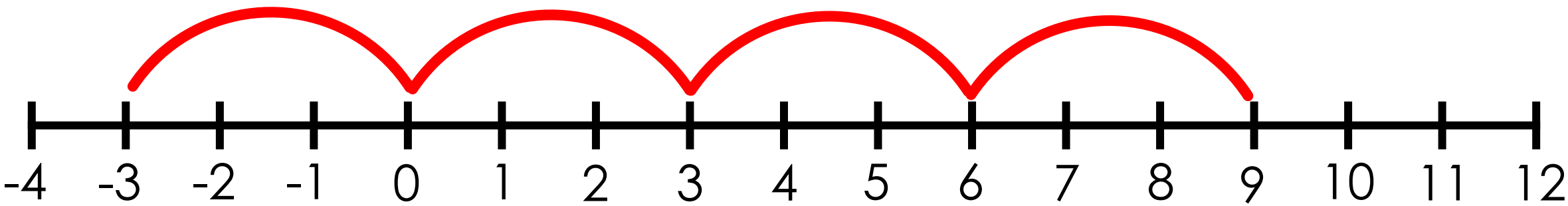
Start counting from **9**

Count back in steps of **3**

The first negative number is ☐

Task 7: Count back through 0

Example A



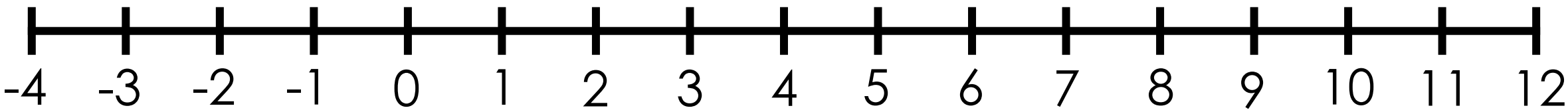
Start counting from **9**

Count back in steps of **3**

The first negative number is **-3**

Task 7: Count back through 0

Example B



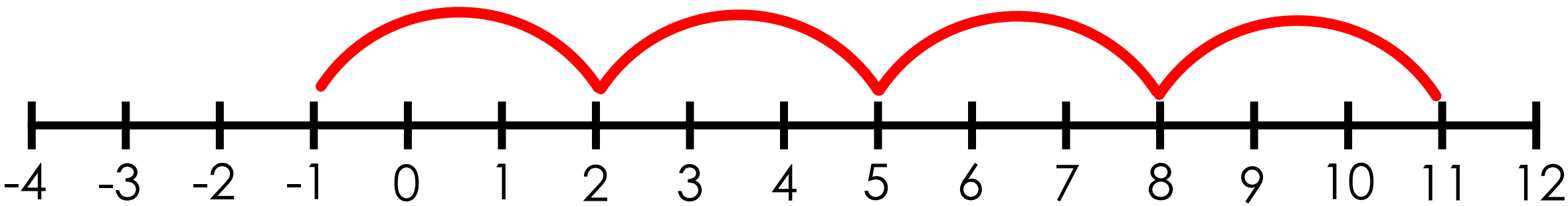
Start counting from **11**

Count back in steps of **3**

The first negative number is ☐

Task 7: Count back through 0

Example B



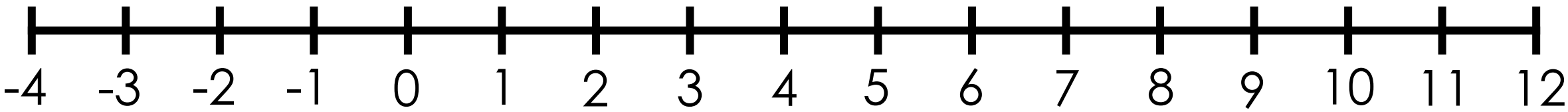
Start counting from **11**

Count back in steps of **3**

The first negative number is **-1**

Task 7: Count back through 0

Example C



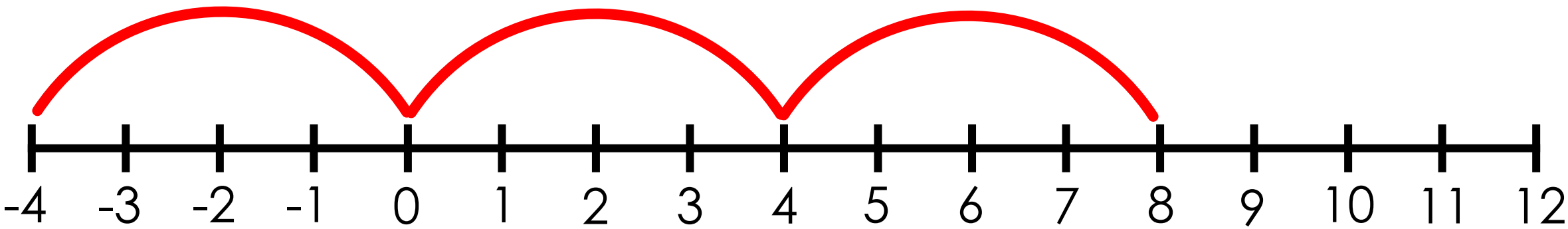
Start counting from **8**

Count back in steps of ☐

The first negative number is **-4**

Task 7: Count back through 0

Example C



Start counting from **8**

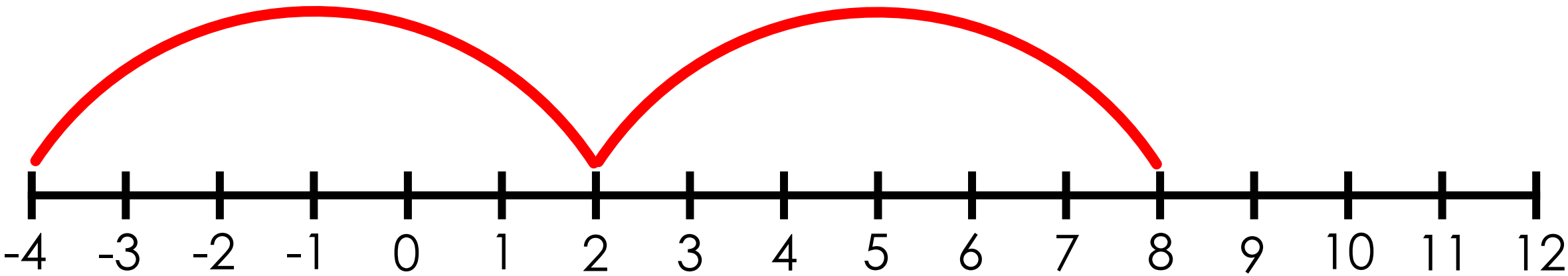
Count back in steps of **4**

The first negative number is **-4**

Answer 1

Task 7: Count back through 0

Example C



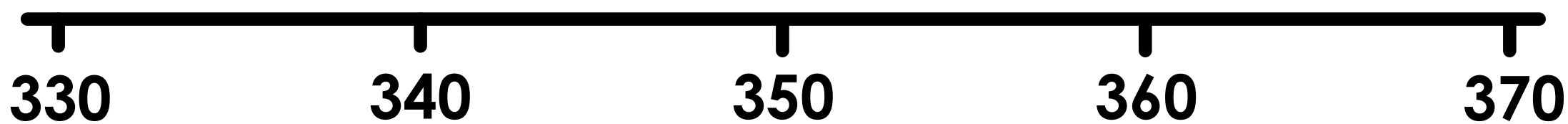
Start counting from **8**

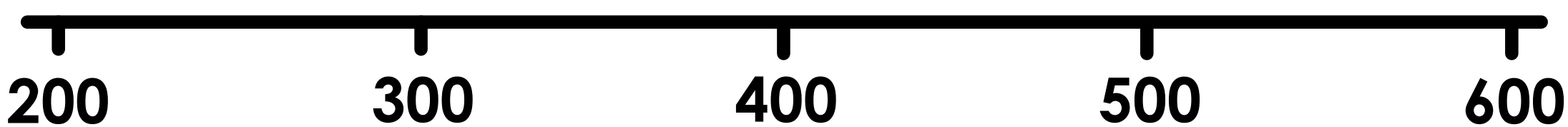
Count back in steps of **6**

The first negative number is **-4**

Answer 2

Task 8: Rounding to 10 and 100

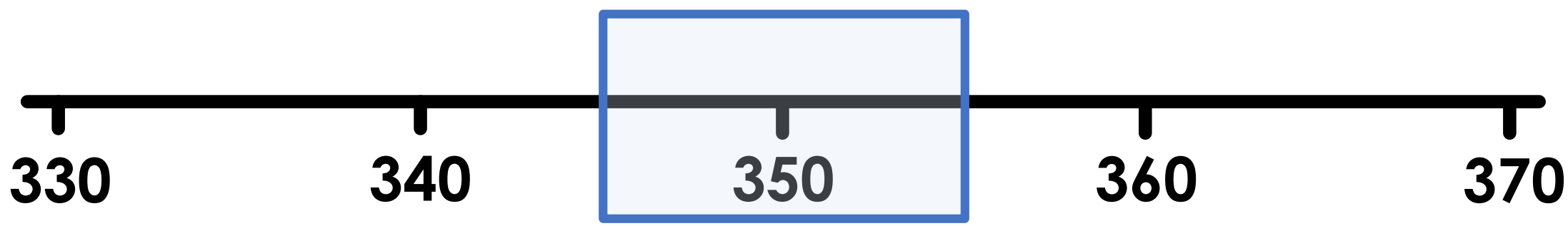


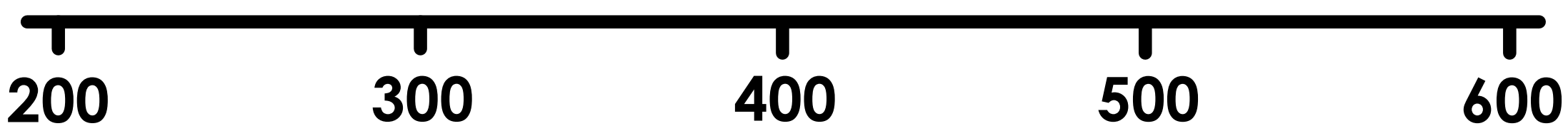


Task 8: Rounding to 10 and 100

Numbers in this space, to the nearest 10, round to 350.

345→354

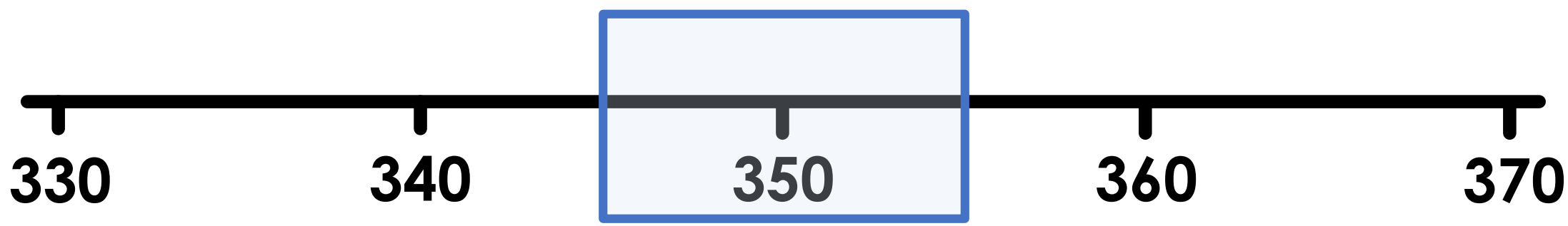




Task 8: Rounding to 10 and 100

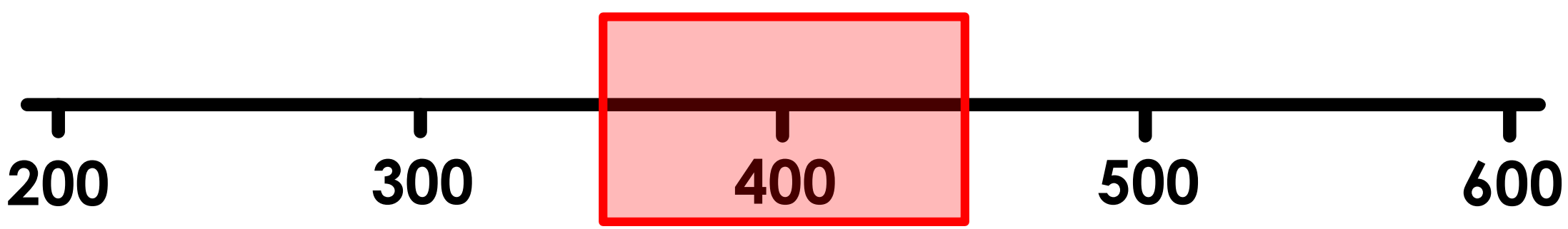
Numbers in this space, to the nearest 10, round to 350.

345→354



Numbers in this space, to the nearest 100, round to 400.

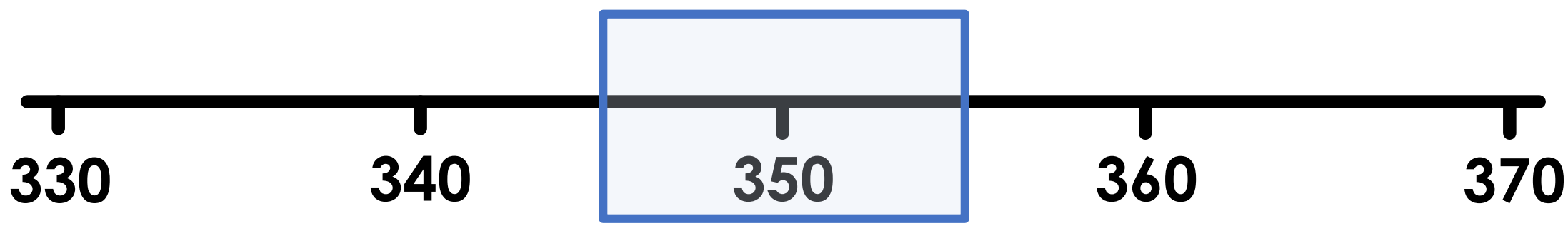
350→449



Task 8: Rounding to 10 and 100

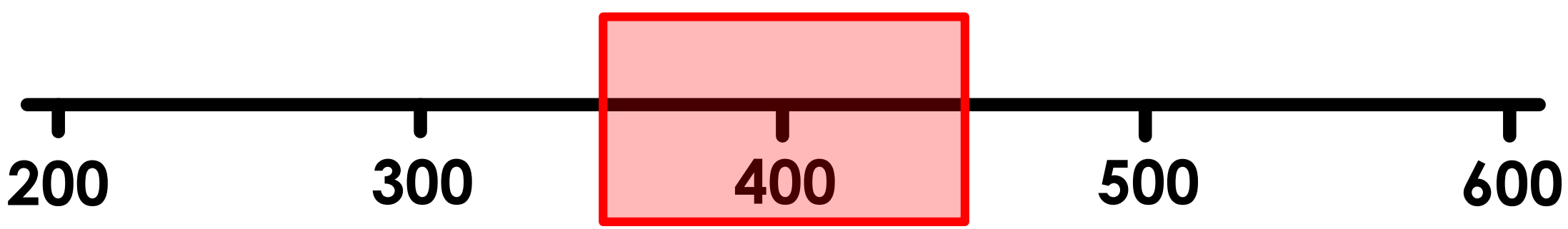
Numbers in this space, to the nearest 10, round to 350.

345→354



Numbers in this space, to the nearest 100, round to 400.

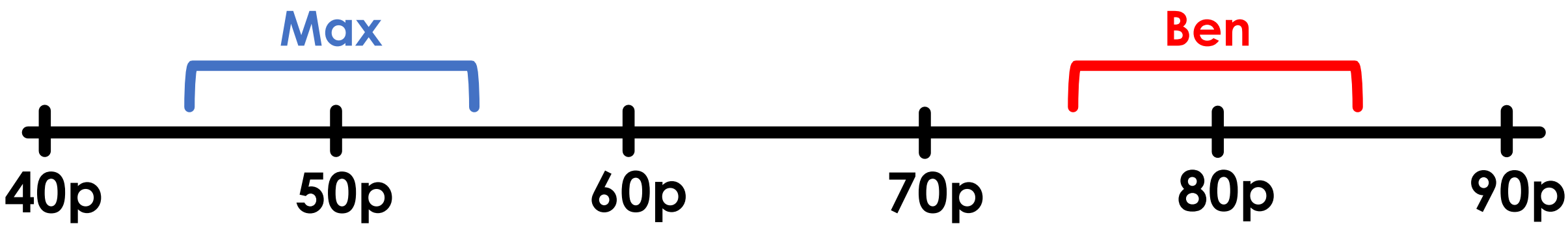
350→449



Numbers in both sections: 350, 351, 352, 353, 354

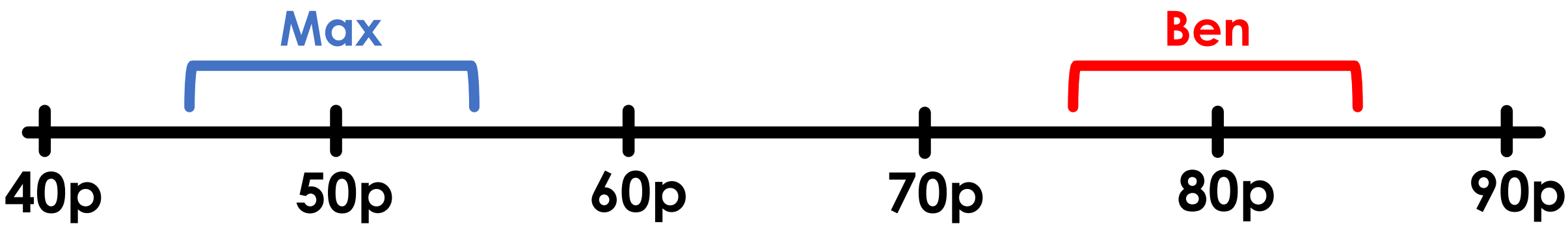
Task 9: Rounding money

Task 9: Rounding money



Task 9: Rounding money

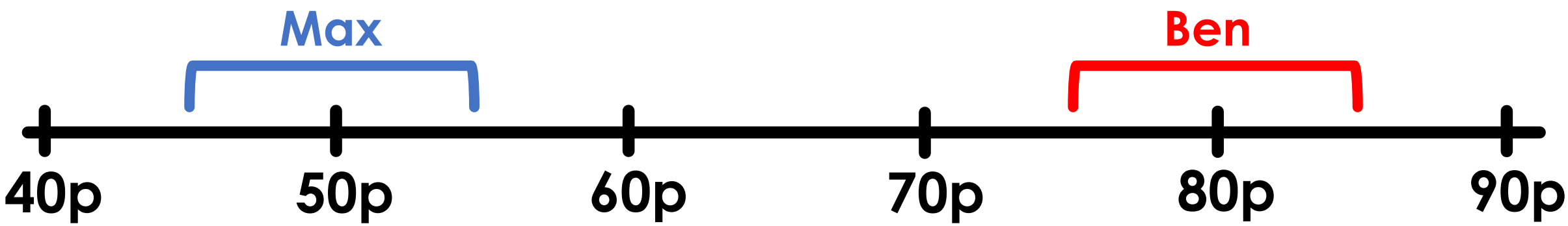
Max has 45p→54p



Task 9: Rounding money

Max has 45p→54p

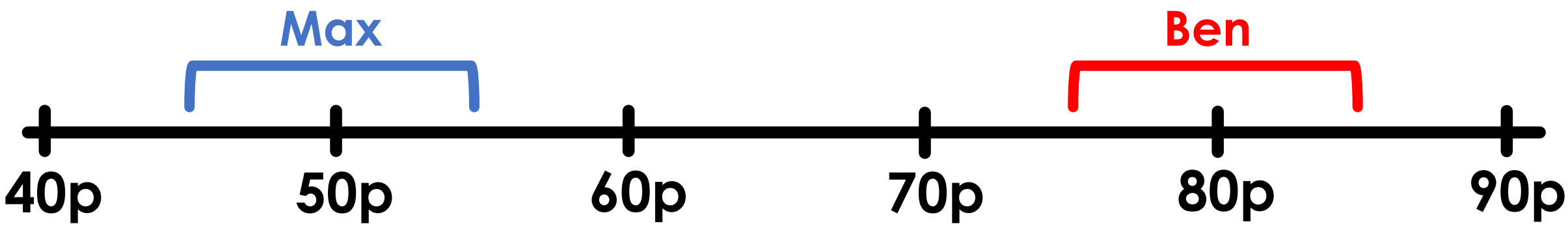
Ben has 75p→84p



Task 9: Rounding money

Max has 45p→54p

Ben has 75p→84p

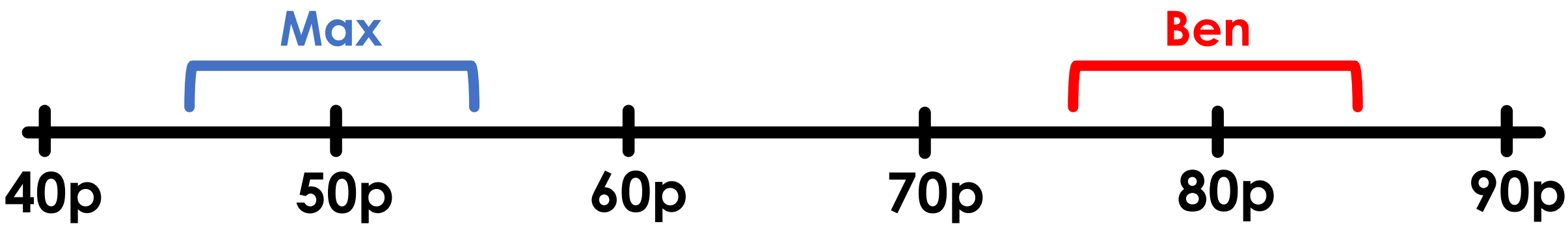


Smallest possible difference: 75p – 54p = <u>21p</u>

Task 9: Rounding money

Max has 45p→54p

Ben has 75p→84p



Smallest possible difference: 75p – 54p = <u>21p</u>

Largest possible difference: 84p – 45p = <u>39p</u>

Task 10: Roman Numerals

Roman Numerals less than 20:

I	VI	XI	XVI
II	VII	XII	XVII
III	VIII	XIII	XVIII
IV	IX	XIV	XIX
V	X	XV	

Task 10: Roman Numerals

Roman Numerals with 4 symbols:

I	VI	XI	XVI
II	VII	XII	XVII
III	VIII	XIII	XVIII
IV	IX	XIV	XIX
V	X	XV	

Task 10: Roman Numerals

Roman Numerals with 3 different symbols:

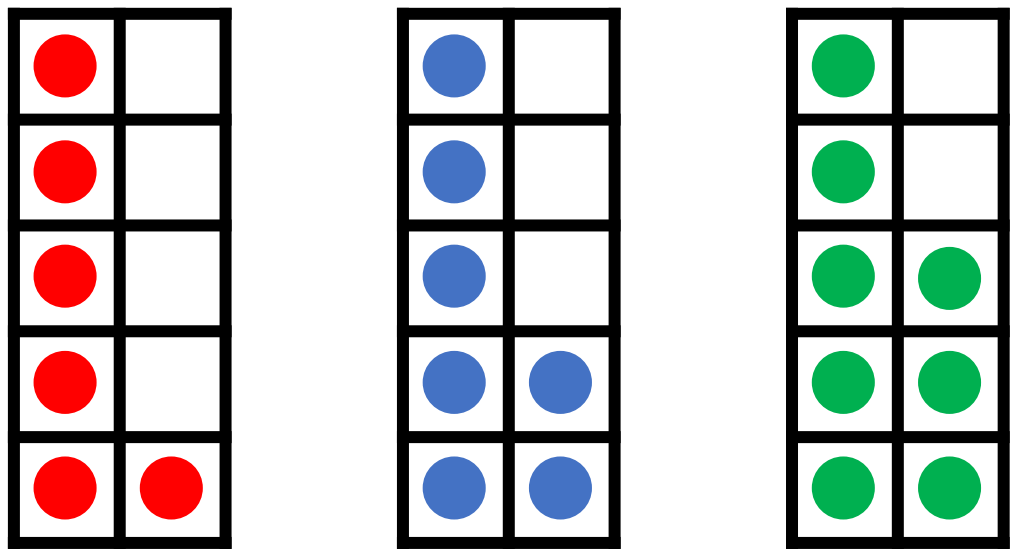
I	VI	XI	XVI
II	VII	XII	XVII
III	VIII	XIII	XVIII
IV	IX	XIV	XIX
V	X	XV	

Task 11: Consecutive numbers

Three consecutive numbers: **6, 7, 8**

Task 11: Consecutive numbers

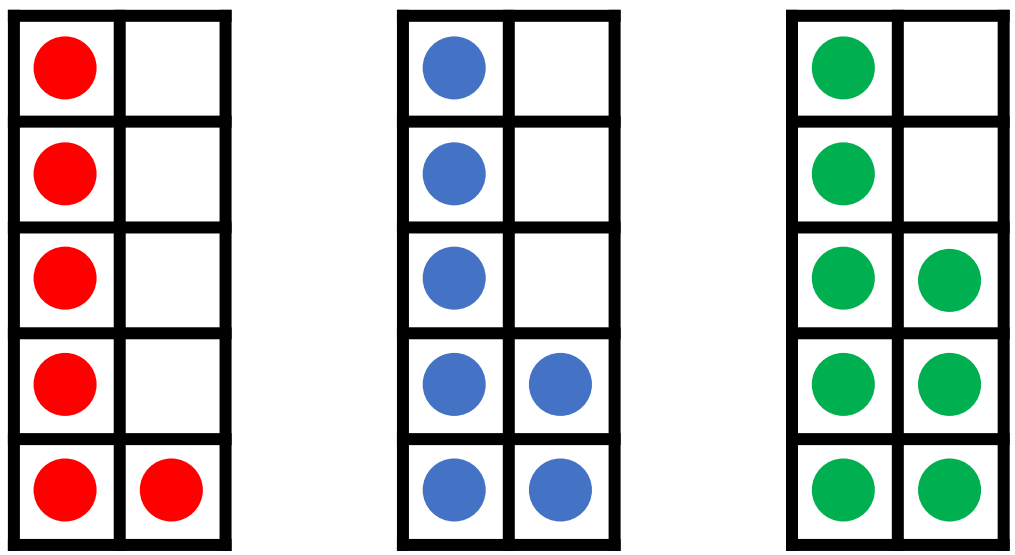
Three consecutive numbers: **6, 7, 8**



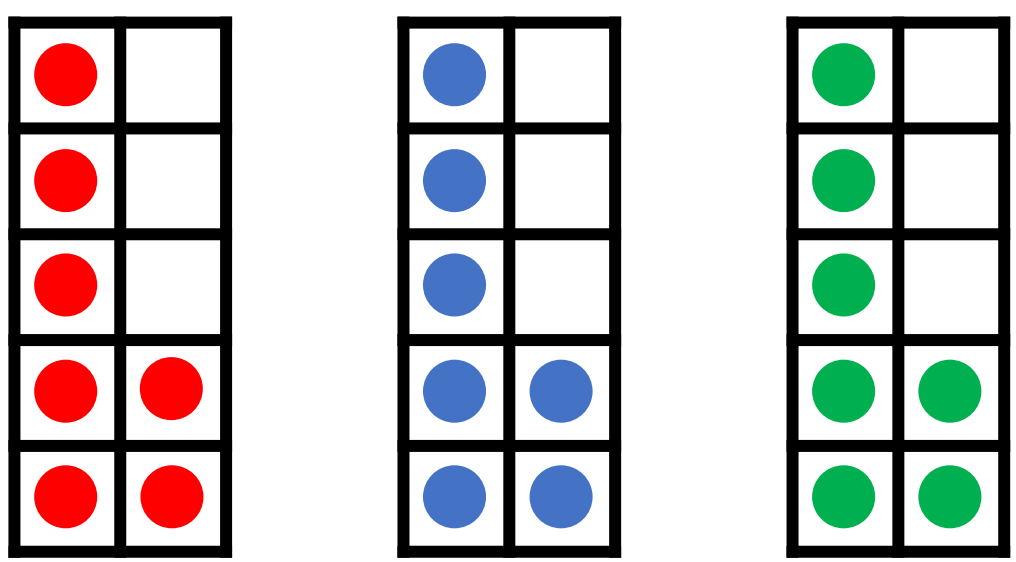
6 + 7 + 8 = 21

Task 11: Consecutive numbers

Three consecutive numbers: **6, 7, 8**



$$6 + 7 + 8 = 21$$



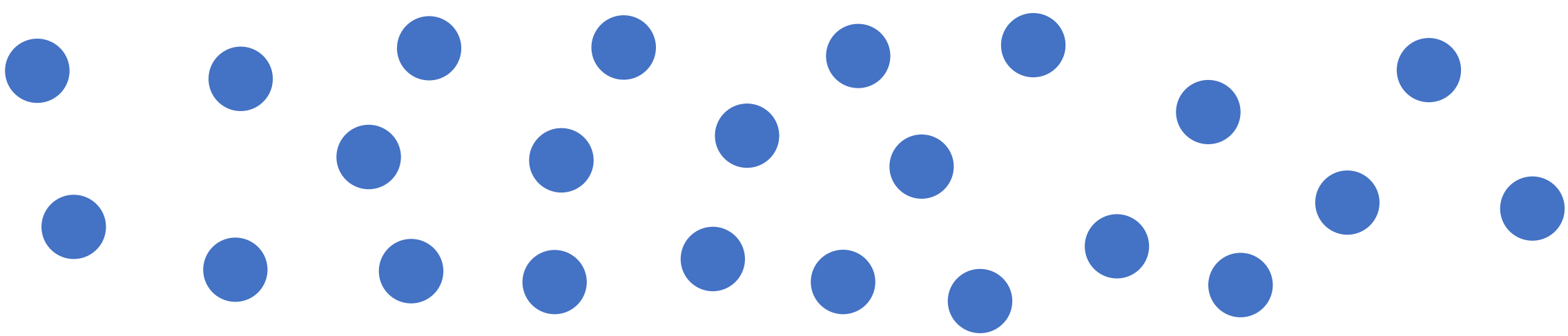
$$3 \times 7 = 21$$

Task 12: Make 24

Total 24

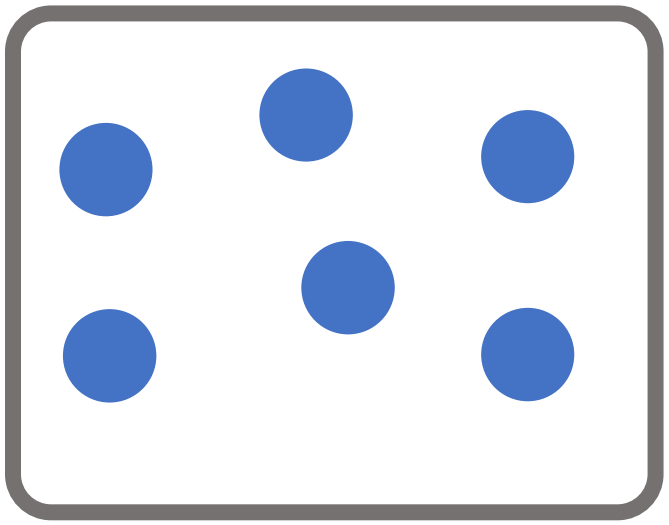
smallest number

largest number

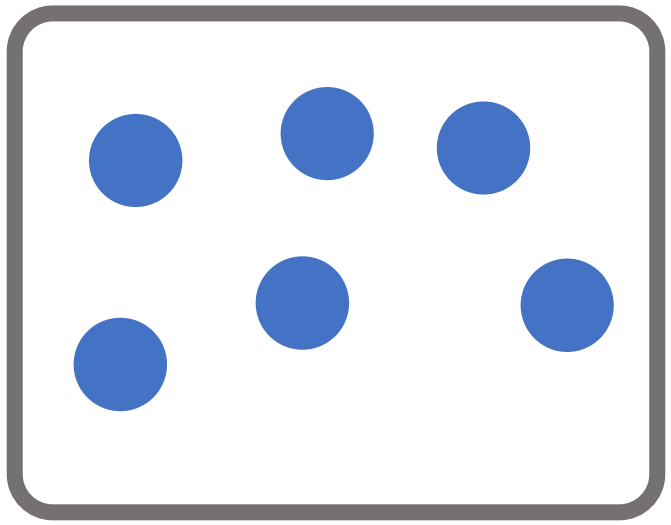


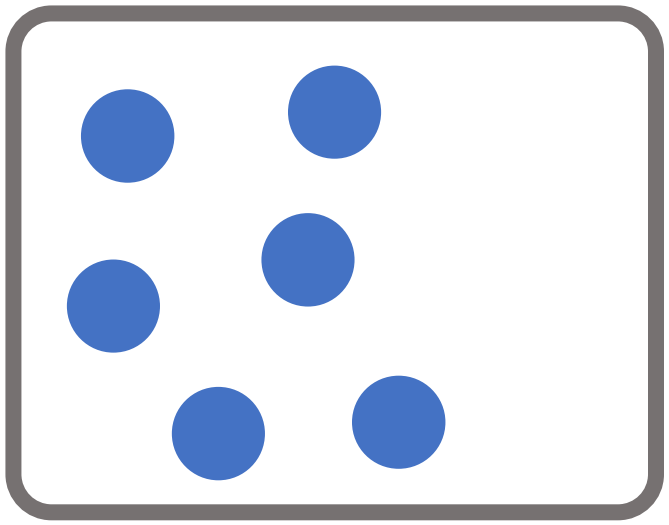
Task 12: Make 24

Total 24 **All more than 5**

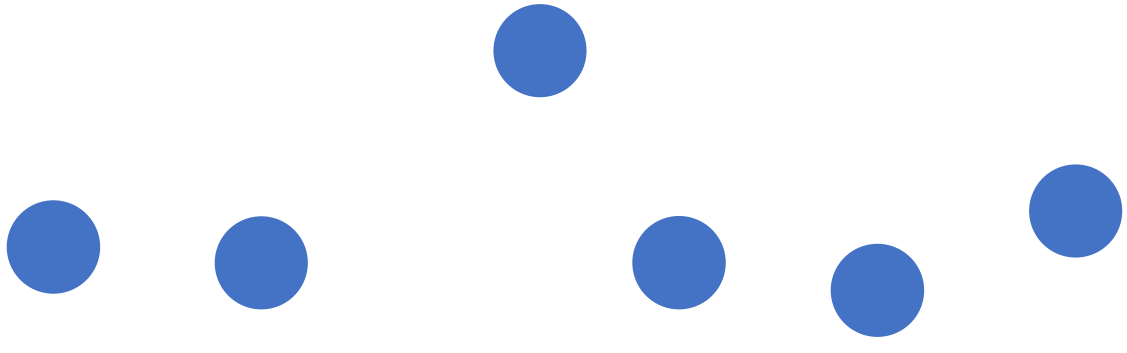


smallest number



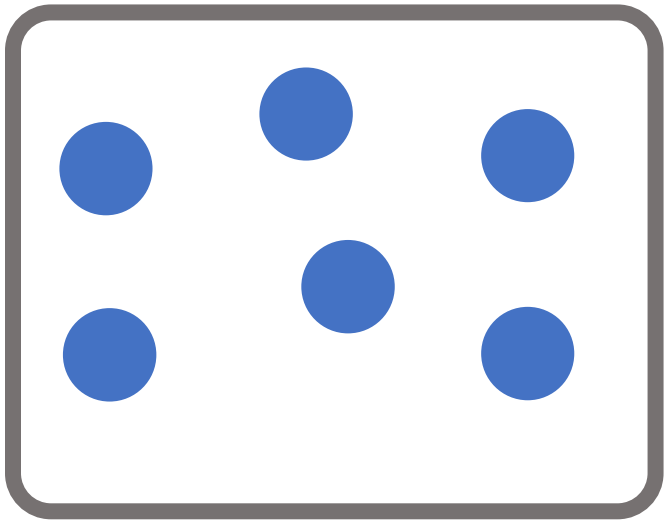


largest number



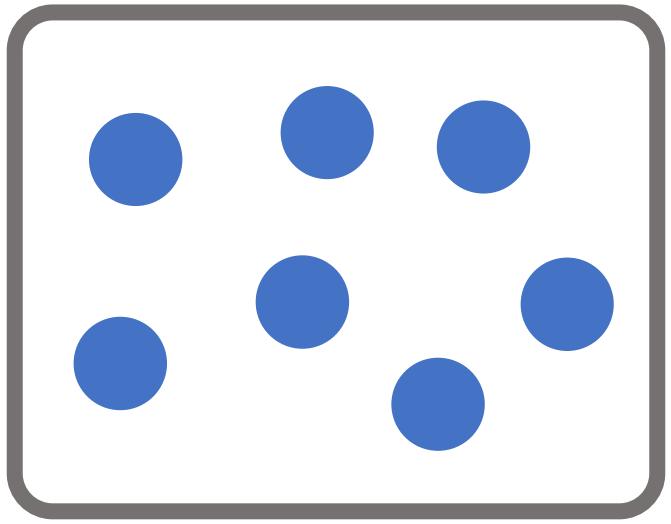
Task 12: Make 24

Total 24

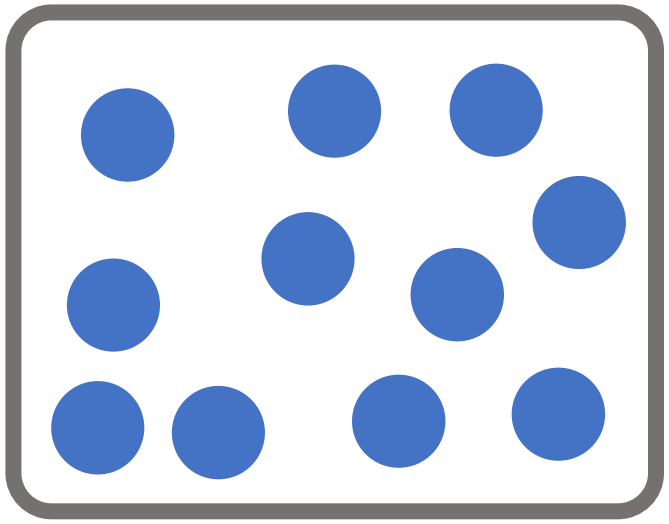


smallest number

All more than 5



All different

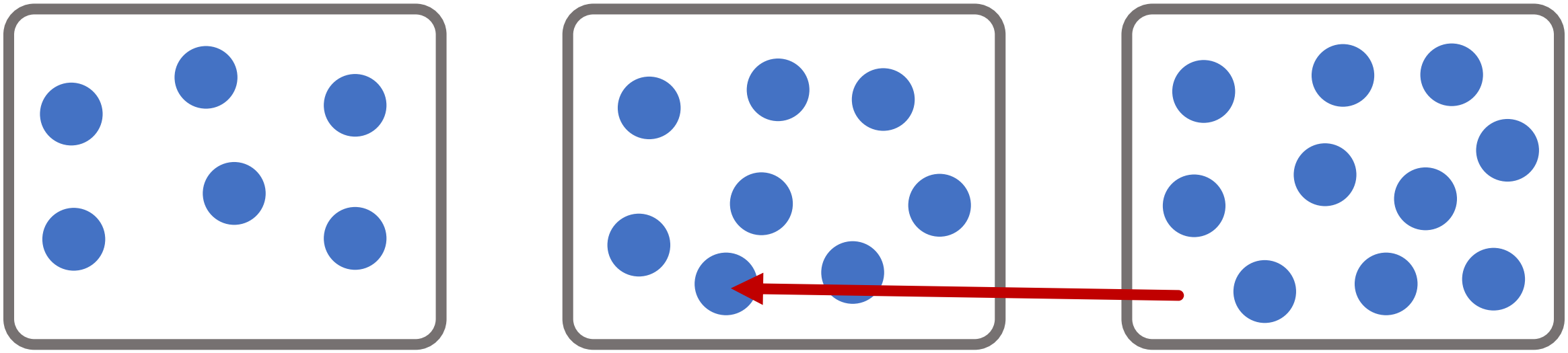


largest number

6, 7, 11

Task 12: Make 24

Total 24 **All more than 5** **All different**

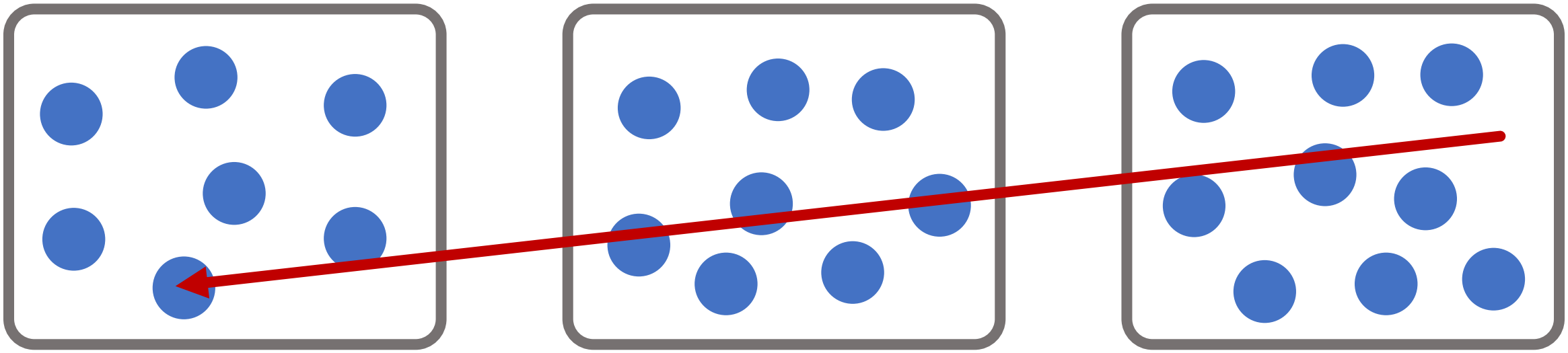


smallest number largest number

6, 7, 11 **6, 8, 10**

Task 12: Make 24

Total 24 **All more than 5** **All different**



smallest number largest number

6, 7, 11 **6, 8, 10** **7, 8, 9**

Task 13: Number sentences

7 − 4 = +

Task 13: Number sentences

Number sentences using:

+	=	7	4	11

7 + 4 = 11 11 = 7 + 4

4 + 7 = 11 11 = 4 + 7

Task 13: Number sentences

Number sentences using:

+ = 7 4 11

7 + 4 = 11 11 = 7 + 4

4 + 7 = 11 11 = 4 + 7

Number sentences using:

– = 7 4 11

11 – 7 = 4 7 = 11 – 4

11 – 4 = 7 4 = 11 – 7

Task 13: Number sentences

Number sentences using:

+ = 7 4 11

7 + 4 = 11 11 = 7 + 4

4 + 7 = 11 11 = 4 + 7

Number sentences using:

– = 7 4 11

11 – 7 = 4 7 = 11 – 4

11 – 4 = 7 4 = 11 – 7

Number sentences using:

+ = 7 4 3

4 + 3 = 7 7 = 4 + 3

3 + 4 = 7 7 = 3 + 4

Task 13: Number sentences

Number sentences using:

+ = 7 4 11

7 + 4 = 11 11 = 7 + 4

4 + 7 = 11 11 = 4 + 7

Number sentences using:

– = 7 4 11

11 – 7 = 4 7 = 11 – 4

11 – 4 = 7 4 = 11 – 7

Number sentences using:

+ = 7 4 3

4 + 3 = 7 7 = 4 + 3

3 + 4 = 7 7 = 3 + 4

Number sentences using:

– = 7 4 3

7 – 4 = 3 4 = 7 – 3

7 – 3 = 4 3 = 7 – 4

Task 14: = and > signs

$20 - \square = 8 + \square$

$\square - \square = 6$

$3 + \square > 10$

3 5 7 8 9

Task 14: = and > signs

$20 - \square = 8 + \square$

$\square - \square = 6$

Only one way to complete this line

$3 + \square > 10$

3 5 7 8 9

Task 14: = and > signs

$$20 - \square = 8 + \square$$

$$\boxed{9} - \boxed{3} = 6$$

$$3 + \square > 10$$

5 7 8

Task 14: = and > signs

$$20 - \square = 8 + \square$$

$$\boxed{9} - \boxed{3} = 6$$

$$3 + \square > 10$$

Only one way to complete this line with numbers left

5 7 8

Task 14: = and > signs

$$20 - \square = 8 + \square$$

$$\boxed{9} - \boxed{3} = 6$$

$$3 + \boxed{8} > 10$$

5 7

Task 14: = and > signs

$$\overbrace{20 - \boxed{7}}^{13} = \overbrace{8 + \boxed{5}}^{13}$$

$$\boxed{9} - \boxed{3} = 6$$

$$3 + \boxed{8} > 10$$

Task 15: Bordering 10

□□ + □ = □□

1

2

3

6

7

9

Task 15: Bordering 10

1 ☐ + ☐ = 2 ☐

3

6

7

9

Task 15: Bordering 10

1 6 + 7 = 2 3

9

16 + 7 = 23

Task 15: Bordering 10

1 7 + 6 = 2 3

9

16 + 7 = 23 17 + 6 = 23

Task 15: Bordering 10

1 7 + 9 = 2 6

3

16 + 7 = 23 17 + 6 = 23 17 + 9 = 26

Task 15: Bordering 10

1	9	+	7	=	2	6		
								3

16 + 7 = 23

17 + 6 = 23

17 + 9 = 26

19 + 7 = 26

Task 15: Bordering 10

2 □ + □ = 3 □

1 6

7 9

16 + 7 = 23 17 + 6 = 23 17 + 9 = 26 19 + 7 = 26

Task 15: Bordering 10

2 7 + 9 = 3 6

1

16 + 7 = 23

17 + 6 = 23

17 + 9 = 26

19 + 7 = 26

27 + 9 = 36

Task 15: Bordering 10

2 9 + 7 = 3 6

1

16 + 7 = 23

17 + 6 = 23

17 + 9 = 26

19 + 7 = 26

27 + 9 = 36

29 + 7 = 36

Task 15: Bordering 10

6 □ + □ = 7 □

1 2 3 9

16 + 7 = 23 17 + 6 = 23 17 + 9 = 26 19 + 7 = 26

27 + 9 = 36 29 + 7 = 36

Task 15: Bordering 10

6 3 + 9 = 7 2

1

16 + 7 = 23

17 + 6 = 23

17 + 9 = 26

19 + 7 = 26

27 + 9 = 36

29 + 7 = 36

63 + 9 = 72

Task 15: Bordering 10

6 9 + 3 = 7 2

1

16 + 7 = 23

17 + 6 = 23

17 + 9 = 26

19 + 7 = 26

27 + 9 = 36

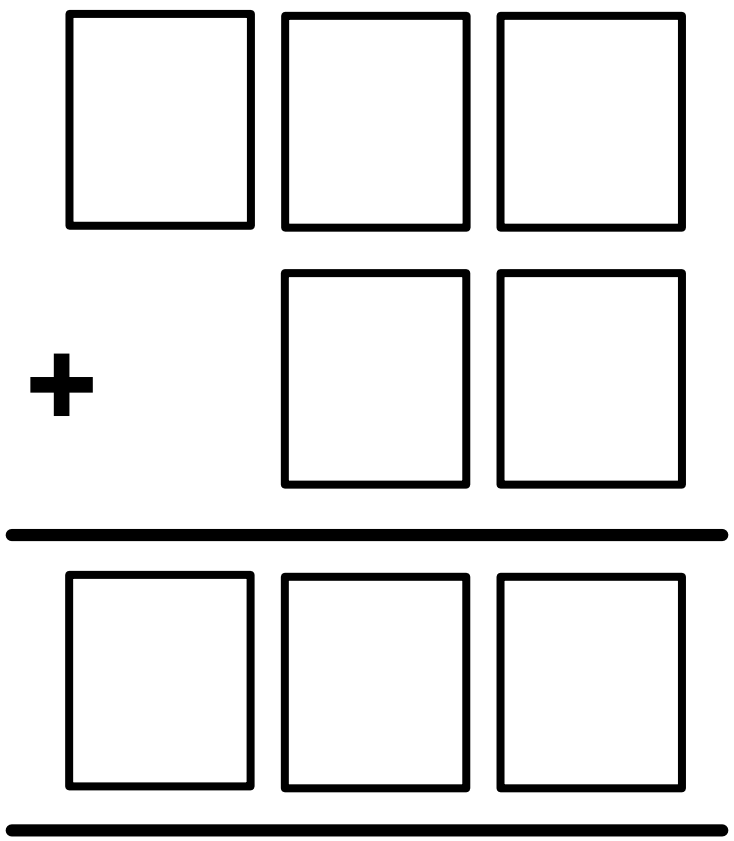
29 + 7 = 36

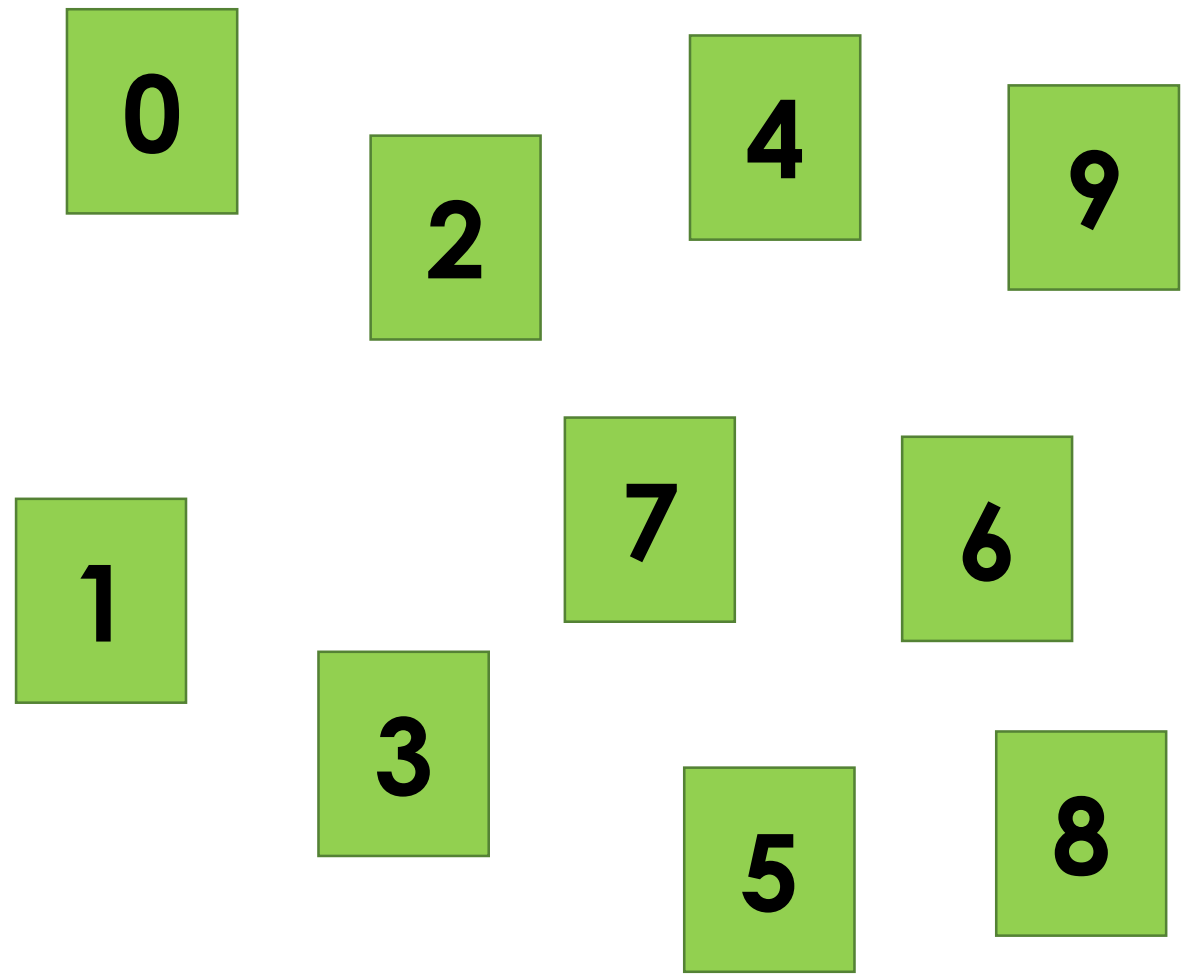
63 + 9 = 72

69 + 3 = 72

Task 16: Position digits to add

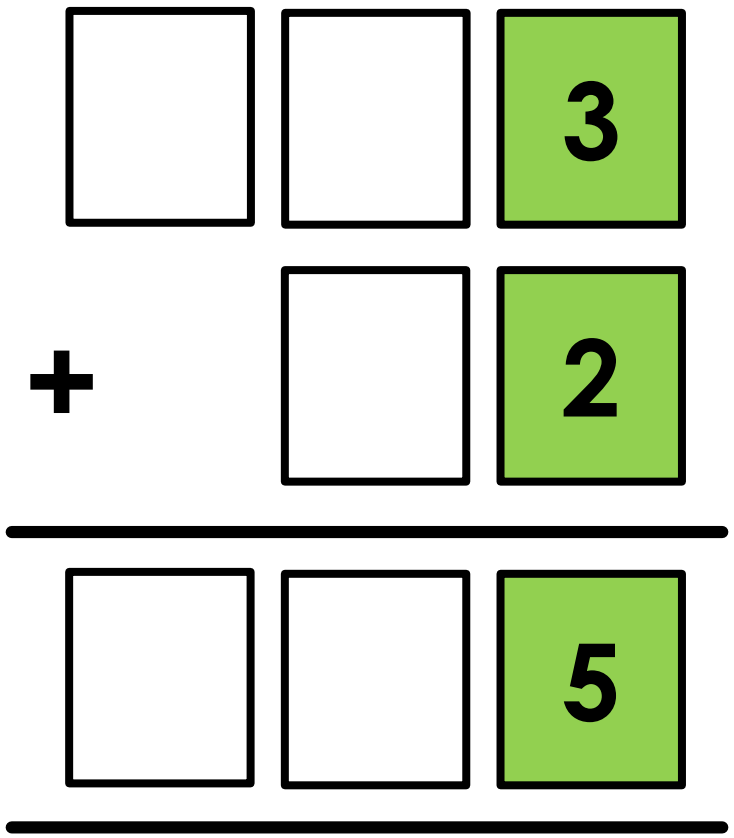
Example 1

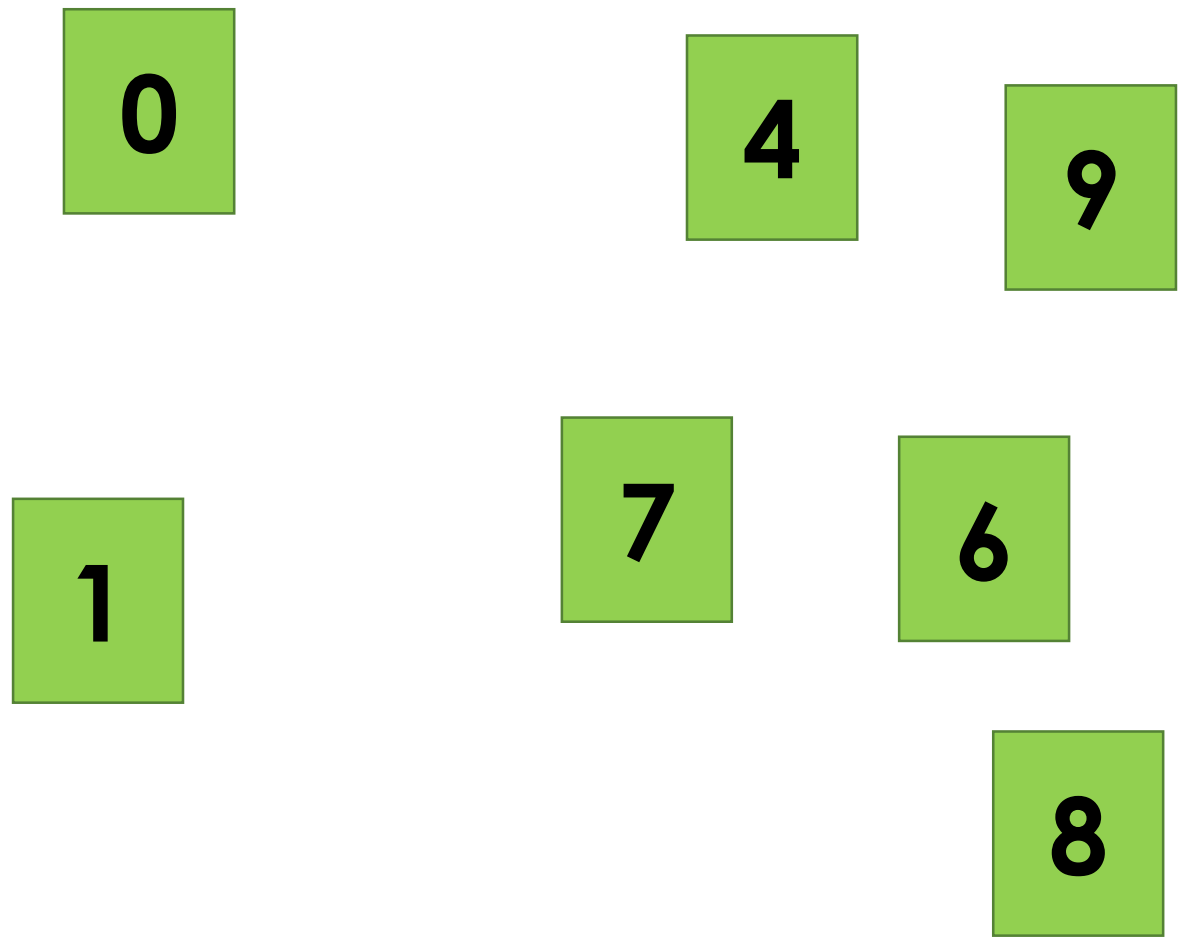




Task 16: Position digits to add

Example 1





Task 16: Position digits to add

Example 1

		1	3
+		9	2
		0	5

4

7

6

8

Task 16: Position digits to add

Example 1

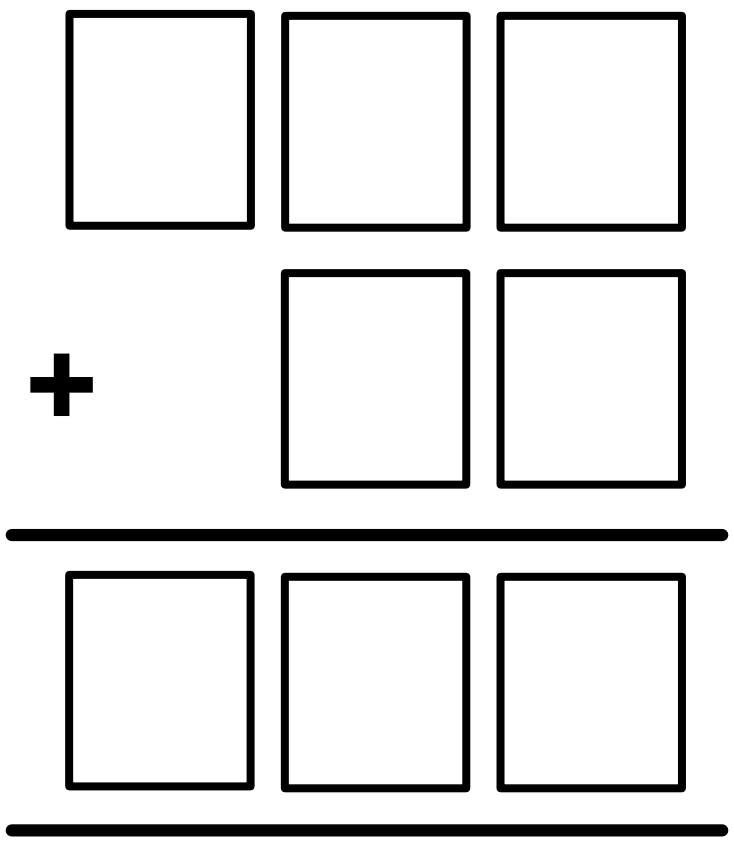
	6	1	3
+		9	2
	7	0	5

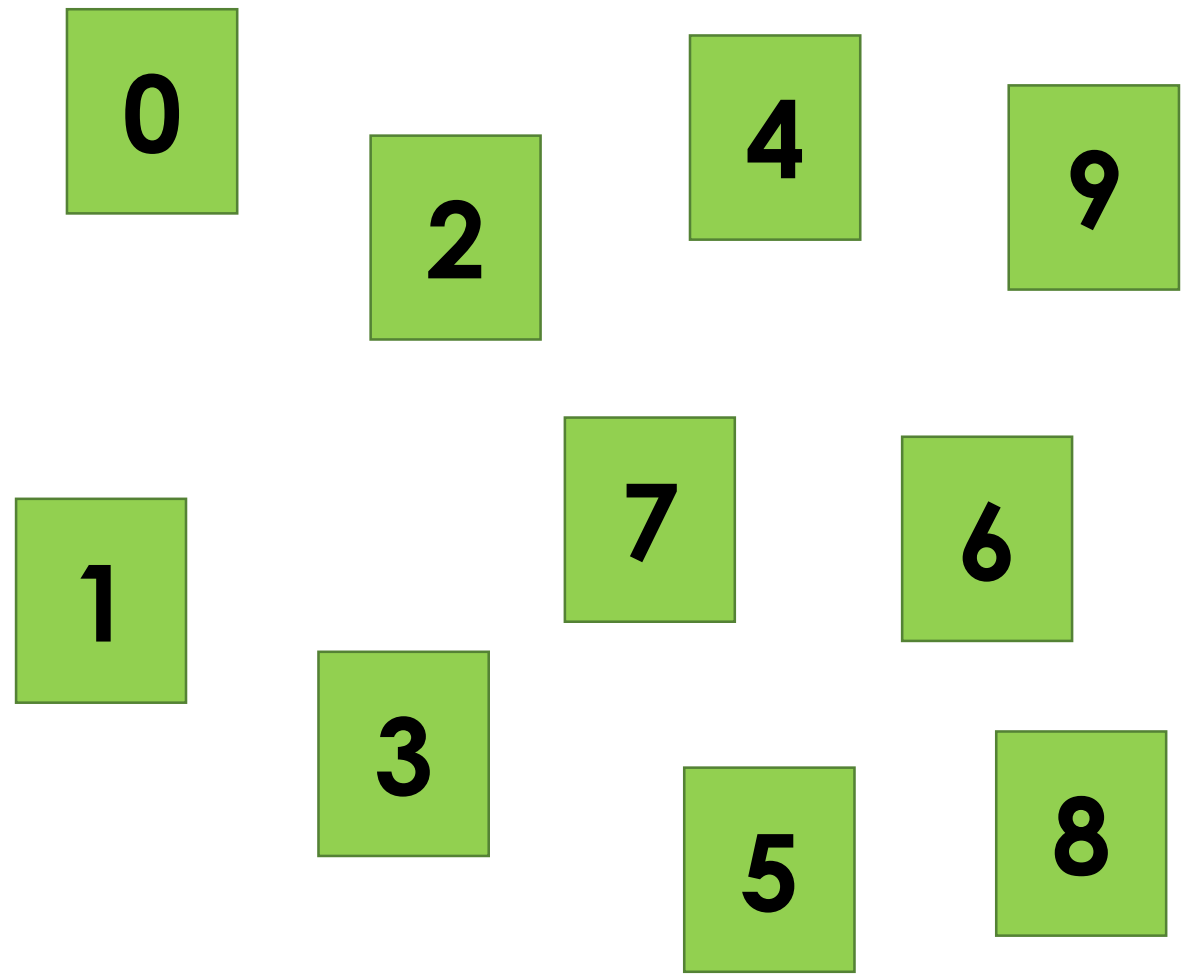
4

8

Task 16: Position digits to add

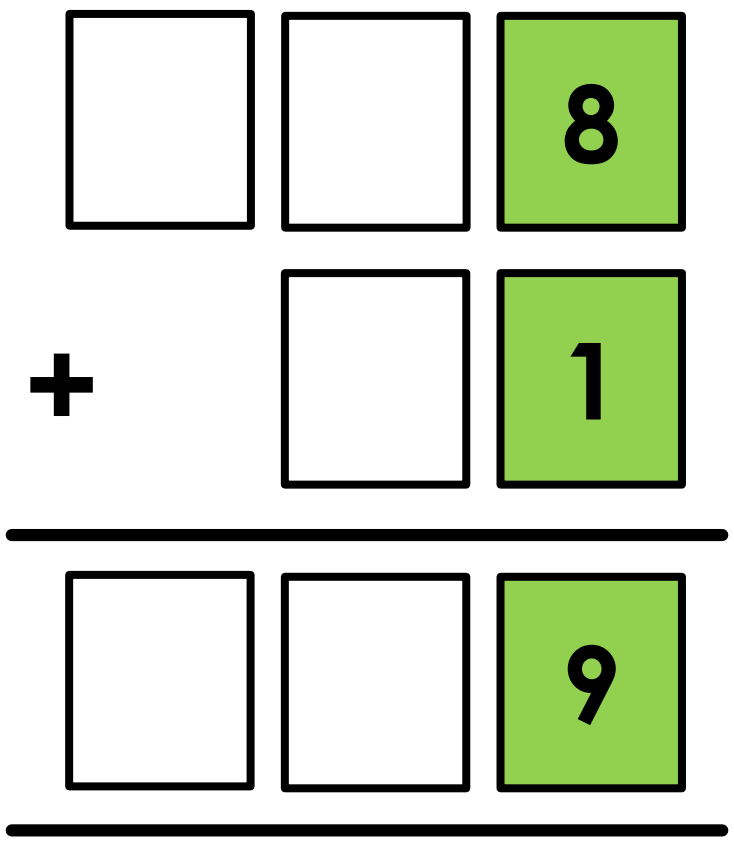
Example 2

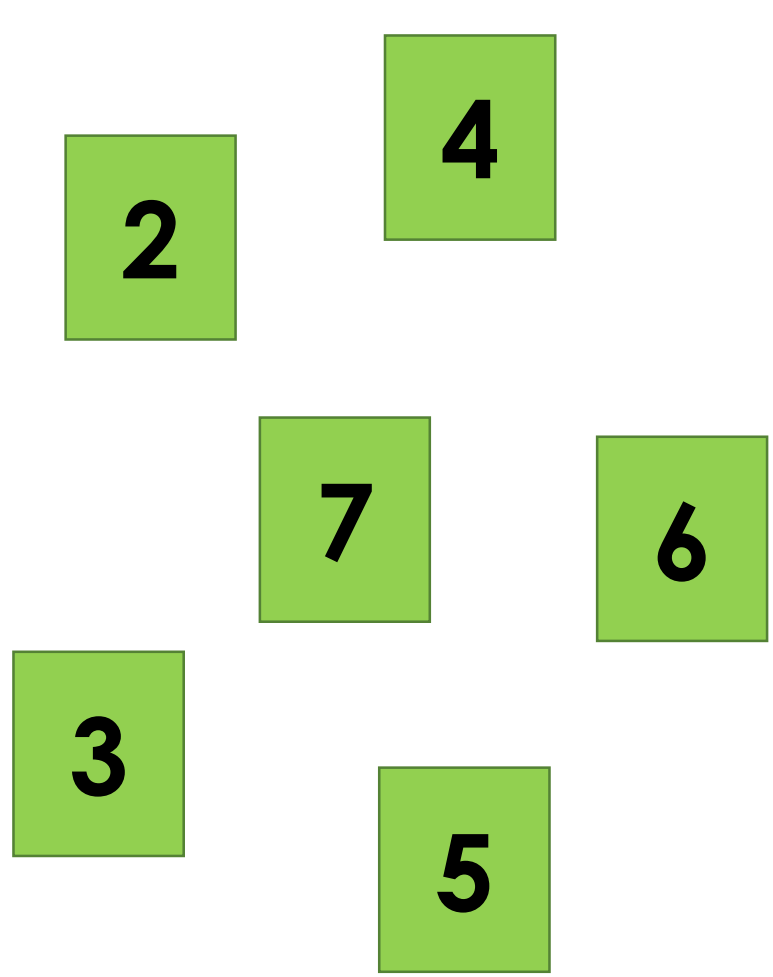




Task 16: Position digits to add

Example 2





Task 16: Position digits to add

Example 2

		6	8
+		7	1
		3	9

0

2

4

5

Task 16: Position digits to add

Example 2

	4	6	8
+		7	1
	5	3	9

0

2

Task 17: Position digits to subtract

Example 1

□□□ - □ = □□

0 2 4 5 7 9

1 3 6 8

Task 17: Position digits to subtract

Example 1

1 0 □ − □ = 9 □

2 4 5 7 3 6 8

Task 17: Position digits to subtract

Example 1

1 0 □ − 8 = 9 □

2 4 5 7 3 6

Task 17: Position digits to subtract

Example 1

1 0 5 – 8 = 9 7

2

4

3

6

Task 17: Position digits to subtract

Example 2

1 0 □ − □ = 9 □

2 4 5 7 3 6 8

Task 17: Position digits to subtract

Example 2

1 0 □ − 4 = 9 □

2

5

7

8

3

6

Task 17: Position digits to subtract

Example 2

1 0 2 – 4 = 9 8

7

5

3

6

Task 18: Sum and difference

Green Task

The sum of my numbers is 10.

The difference between my numbers is 4.

Task 18: Sum and difference

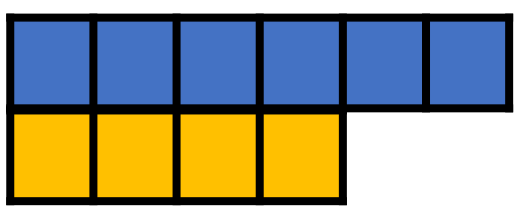
Green Task

The sum of my numbers is 10.

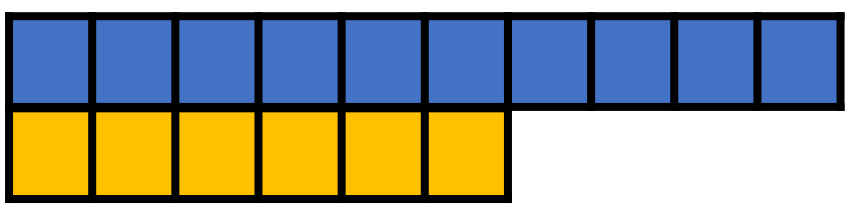
The difference between my numbers is 4.

Which one is correct?

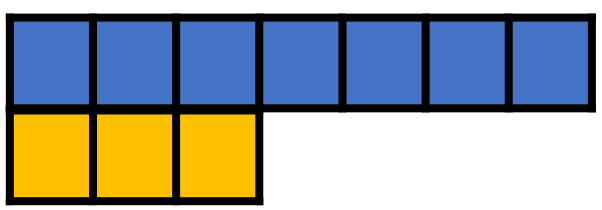
6 and 4



10 and 6



7 and 3



Task 18: Sum and difference

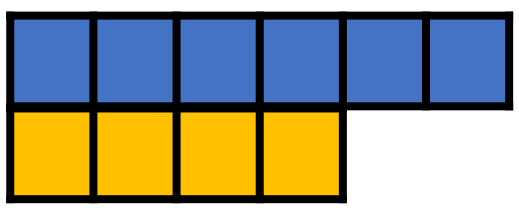
Green Task

The sum of my numbers is 10.

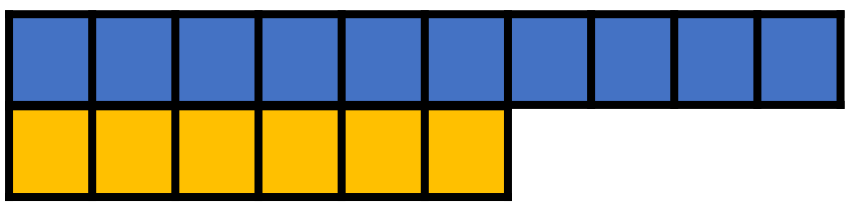
The difference between my numbers is 4.

Which one is correct?

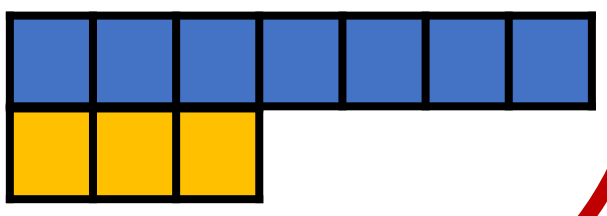
6 and 4



10 and 6



7 and 3



Task 18: Sum and difference

Yellow Task

The sum of my numbers is 30.

The difference between my numbers is 4.

Task 18: Sum and difference

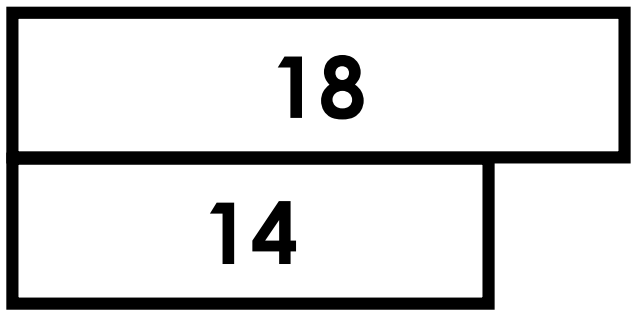
Yellow Task

The sum of my numbers is 30.

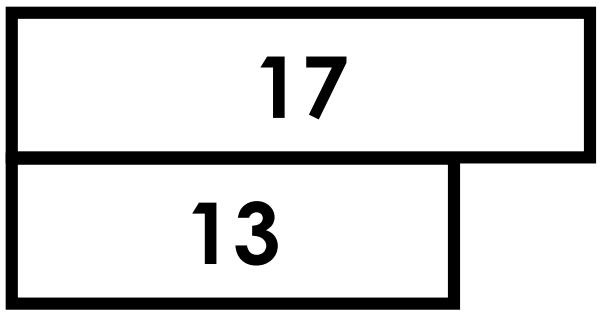
The difference between my numbers is 4.

Which one is correct?

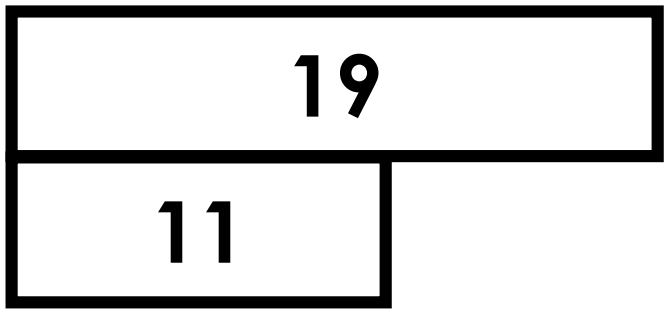
18 and 14



17 and 13



19 and 11



Task 18: Sum and difference

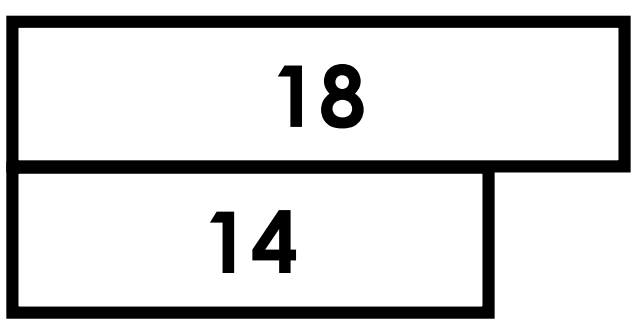
Yellow Task

The sum of my numbers is 30.

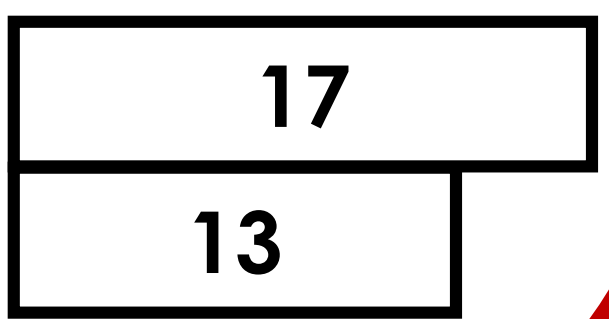
The difference between my numbers is 4.

Which one is correct?

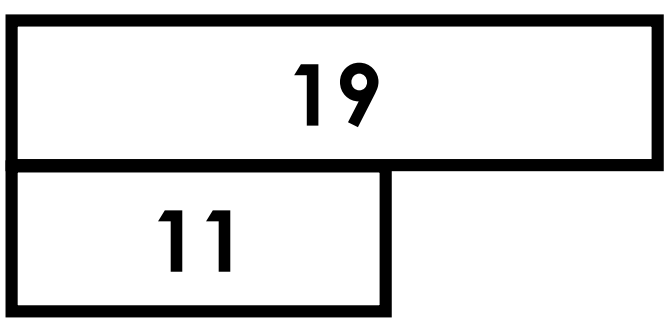
18 and 14



17 and 13



19 and 11



Task 19: More boys or girls?

Example A

There are 8 children at the park.

There are 2 more boys than girls at the park.

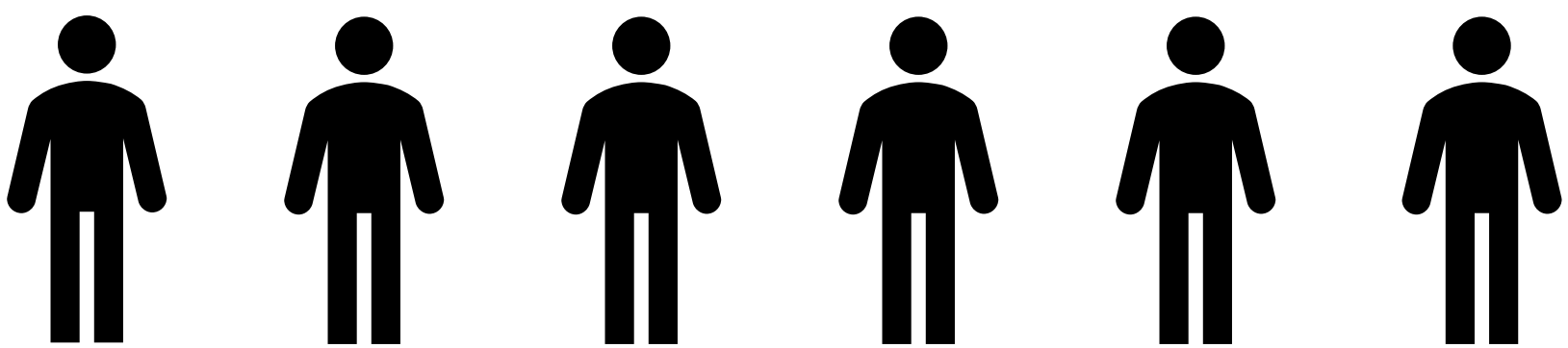
Task 19: More boys or girls?

Example A

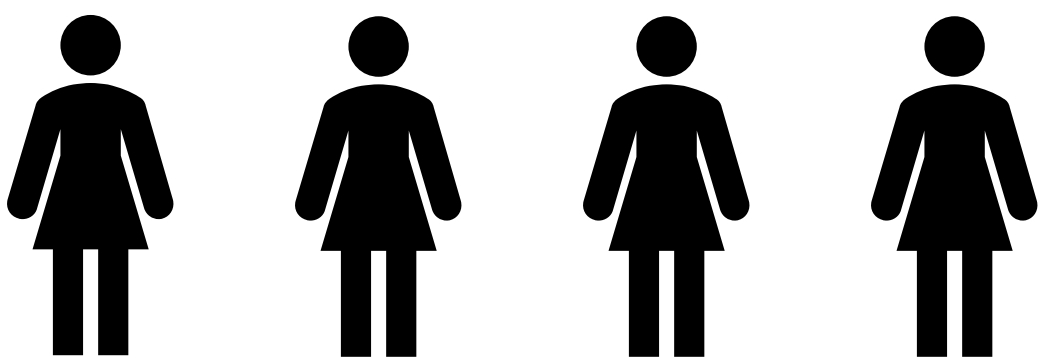
There are 8 children at the park.

There are 2 more boys than girls at the park.

Spot the mistake:



6 boys



4 girls

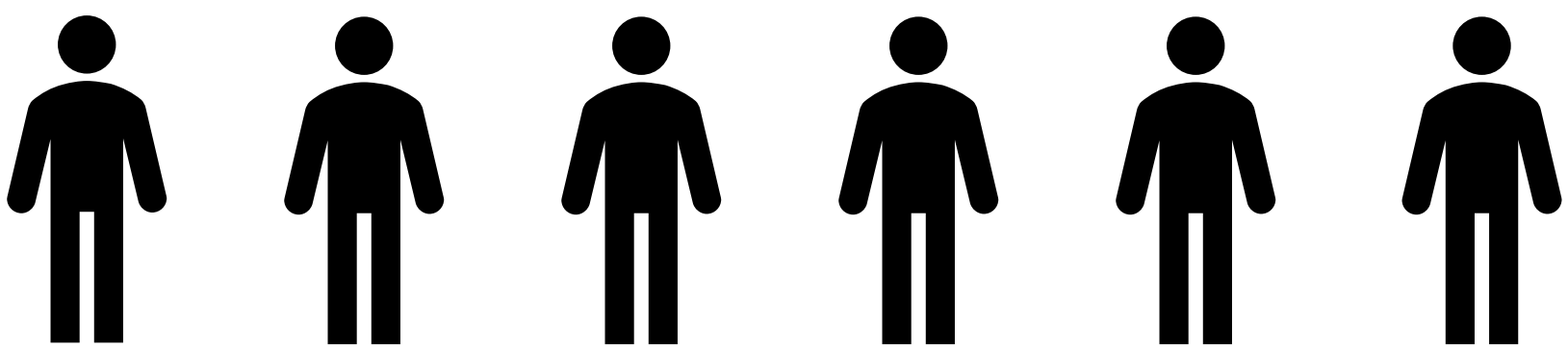
Task 19: More boys or girls?

Example A

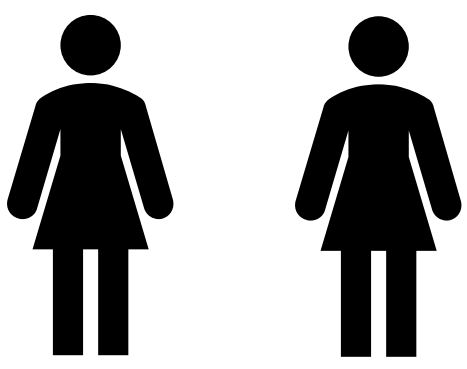
There are 8 children at the park.

There are 2 more boys than girls at the park.

Spot the mistake:



6 boys



2 girls

Task 19: More boys or girls?

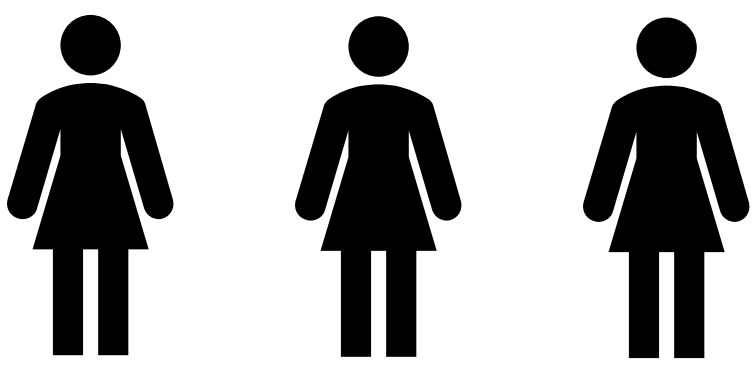
Example A

There are 8 children at the park.

There are 2 more boys than girls at the park.

Answer:

5 boys



3 girls

Task 19: More boys or girls?

Example B

There are 14 children at the party.

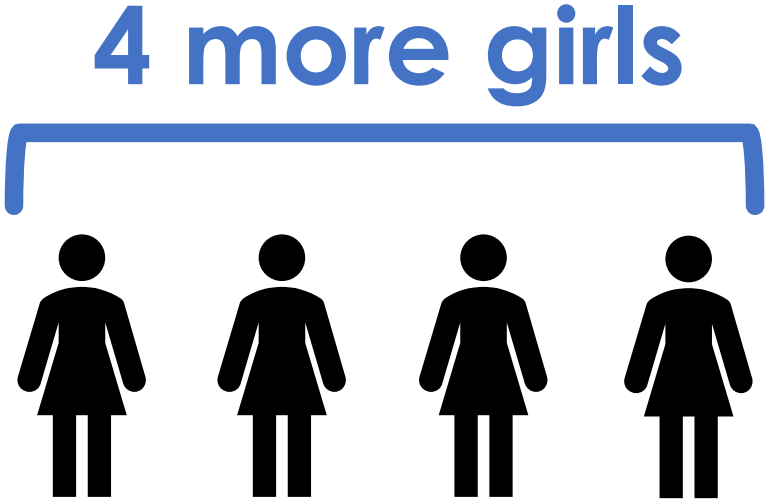
There are 4 more girls than boys at the party.

Task 19: More boys or girls?

Example B

There are 14 children at the party.

There are 4 more girls than boys at the party.

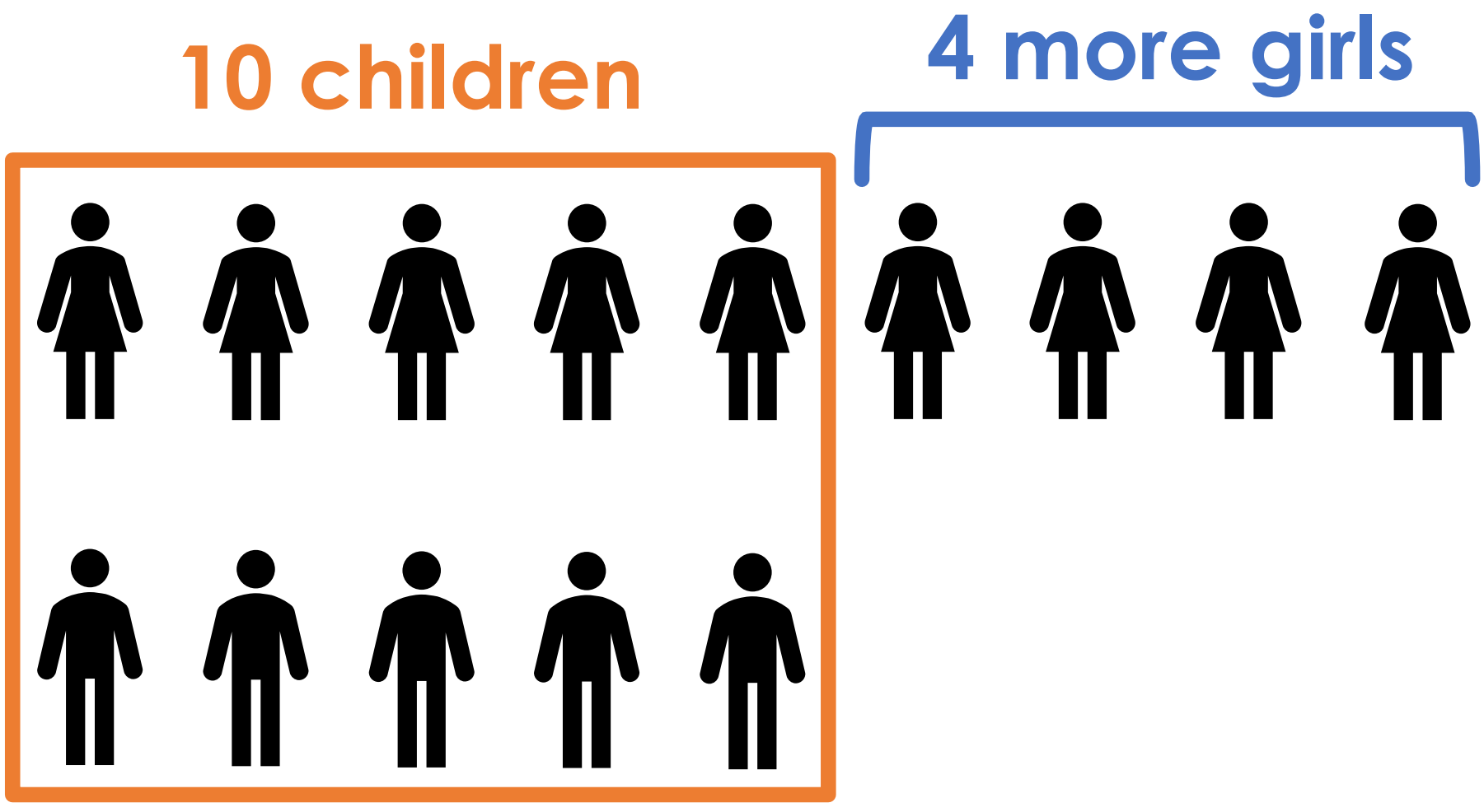


Task 19: More boys or girls?

Example B

There are 14 children at the party.

There are 4 more girls than boys at the party.

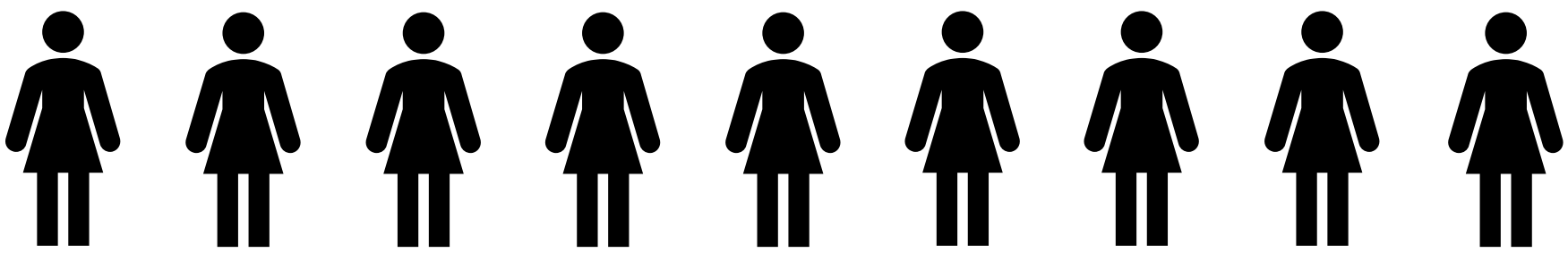


Task 19: More boys or girls?

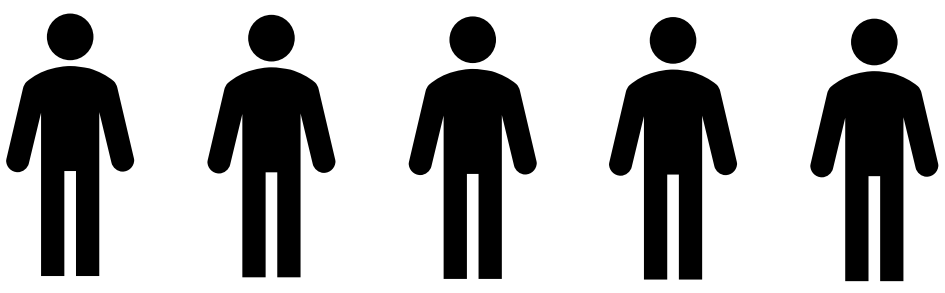
Example B

There are 14 children at the party.

There are 4 more girls than boys at the party.



9 girls



5 boys

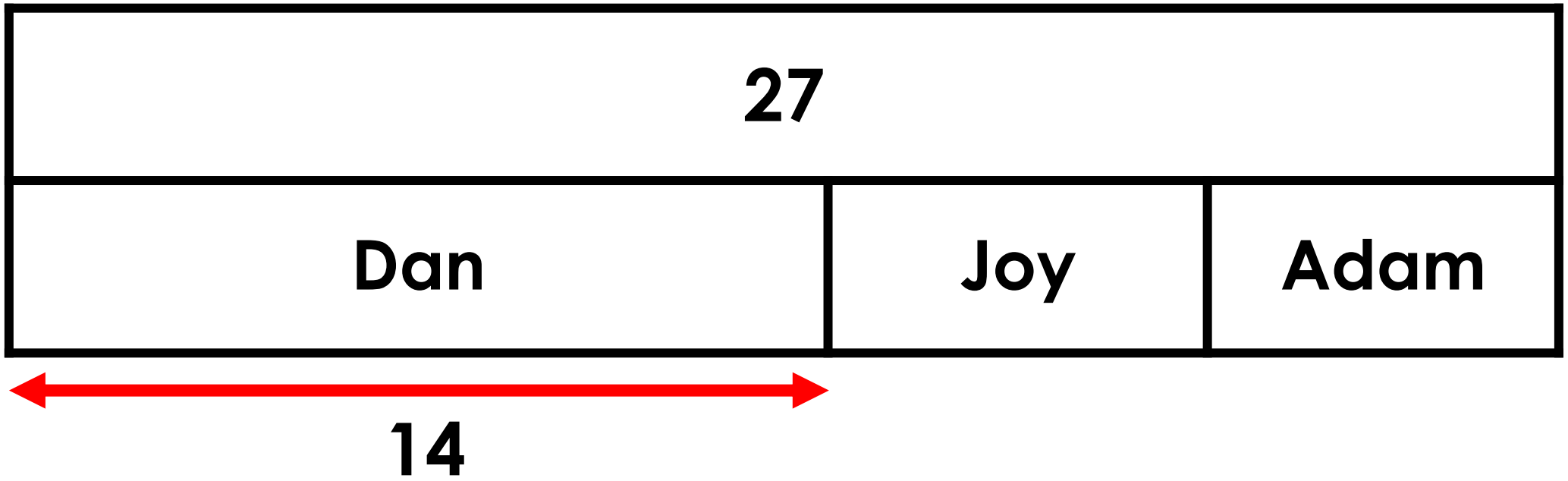
Task 20: Part/whole word questions

Green Task

Dan has **14** stickers. Joy has ☐ stickers.

Adam has ☐ stickers. They have **27** stickers in total.

Joy has one more sticker than Adam.



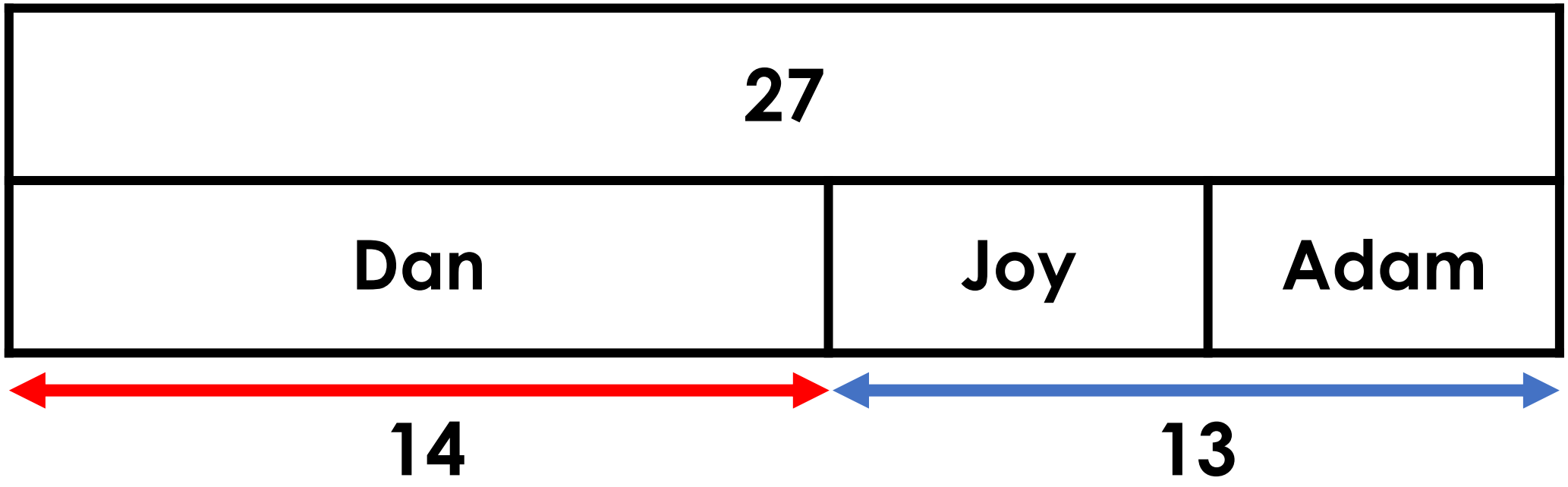
Task 20: Part/whole word questions

Green Task

Dan has **14** stickers. Joy has ☐ stickers.

Adam has ☐ stickers. They have **27** stickers in total.

Joy has one more sticker than Adam.



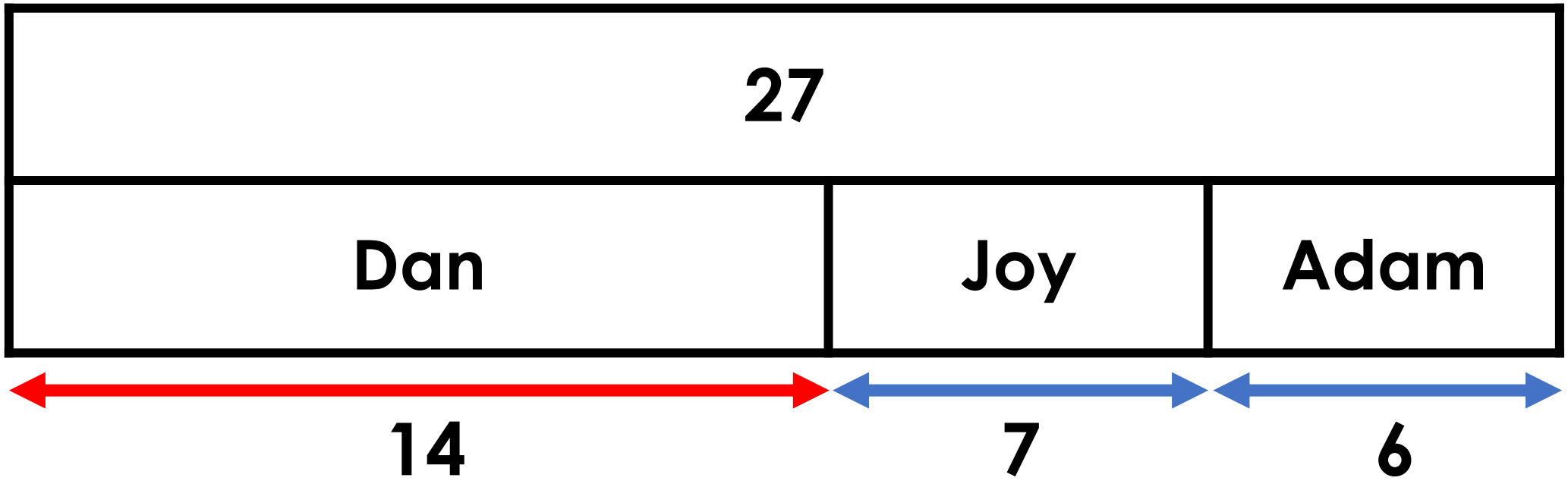
Task 20: Part/whole word questions

Green Task

Dan has **14** stickers. Joy has $\boxed{7}$ stickers.

Adam has $\boxed{6}$ stickers. They have **27** stickers in total.

Joy has one more sticker than Adam.



Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 10

Vicky:

Matt: 5

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 10

Vicky: 15

Matt: 5

Incorrect: Vicky has less than Mo

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 12

Vicky:

Matt: 6

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 12

Vicky: 12

Matt: 6

Incorrect: Vicky has less than Mo

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 14

Vicky:

Matt: 7

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 14

Vicky: 9

Matt: 7

Correct: Vicky has less than Mo and more than Matt

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 16

Vicky:

Matt: 8

Task 20: Part/whole word questions

Yellow Task

Mo has ☐ stickers. Vicky has ☐ stickers.

Matt has ☐ stickers. They have **30** stickers in total.

Mo has twice as many stickers as Matt.

Vicky has more stickers than Matt but less than Mo.

twice as many

Mo: 16

Vicky: 6

Matt: 8

Incorrect: Vicky has more than Matt

Task 21: Change at the shop

Example answer 1

I buy ☐ sandwich(es) and ☐ drink(s).

I pay with a £5 note.

I get ☐ change.

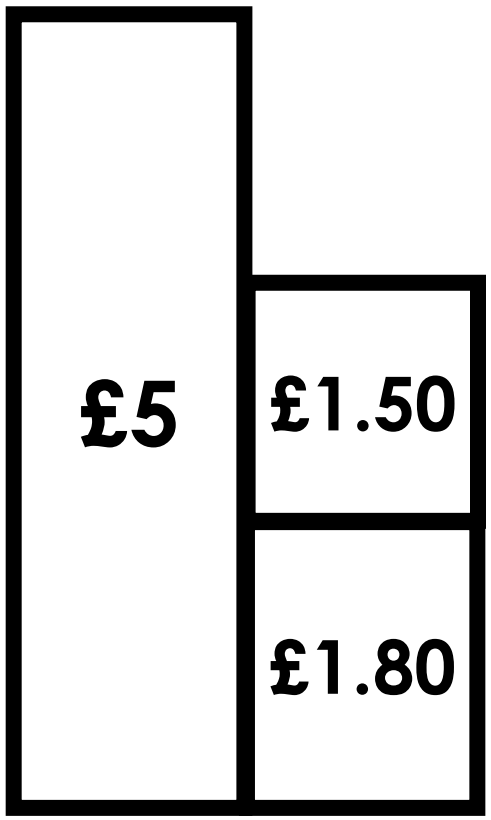
Task 21: Change at the shop

Example answer 1

I buy [1] sandwich(es) and [5] drink(s).

I pay with a £5 note.

I get [ ] change.



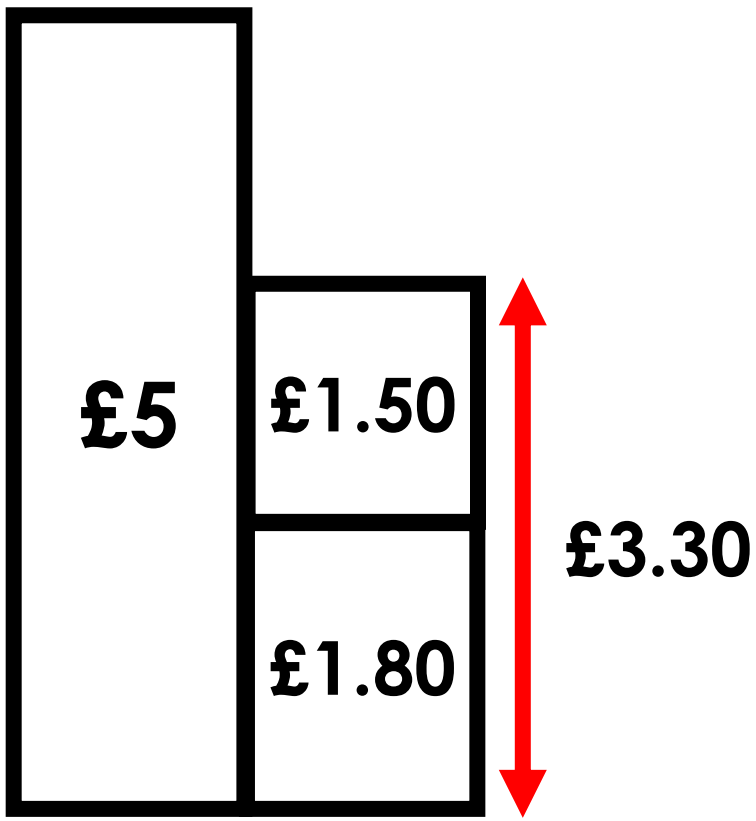
Task 21: Change at the shop

Example answer 1

I buy [1] sandwich(es) and [5] drink(s).

I pay with a £5 note.

I get [ ] change.



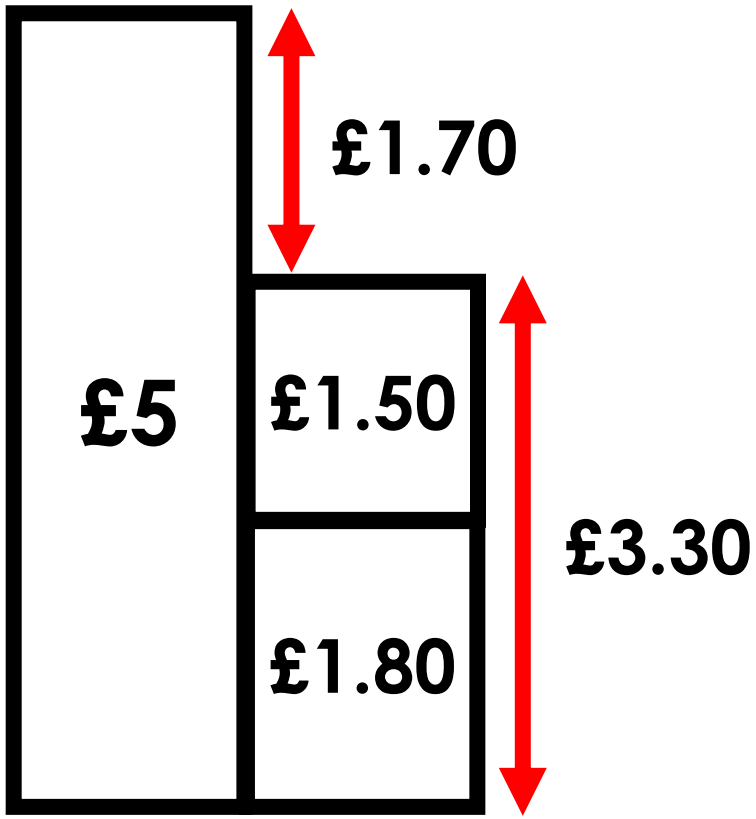
Task 21: Change at the shop

Example answer 1

I buy **1** sandwich(es) and **5** drink(s).

I pay with a £5 note.

I get **£1.70** change.



Task 21: Change at the shop

Example answer 2

I buy ☐ sandwich(es) and ☐ drink(s).

I pay with a £5 note.

I get ☐ change.

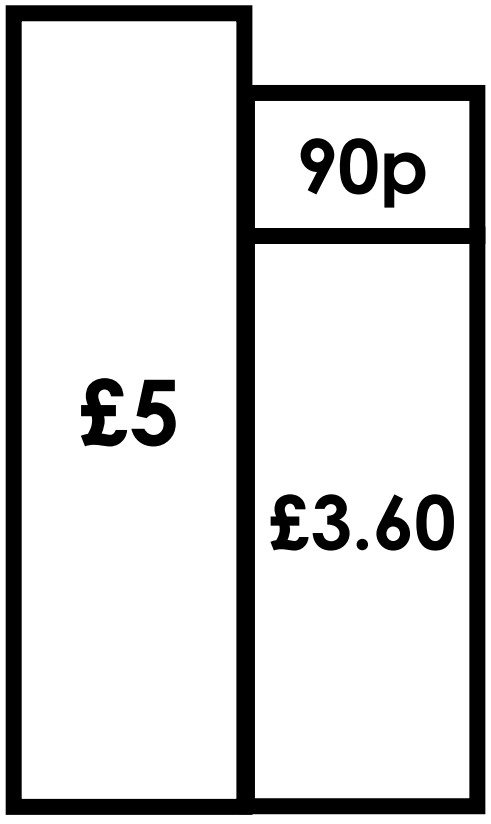
Task 21: Change at the shop

Example answer 2

I buy [2] sandwich(es) and [3] drink(s).

I pay with a £5 note.

I get [ ] change.



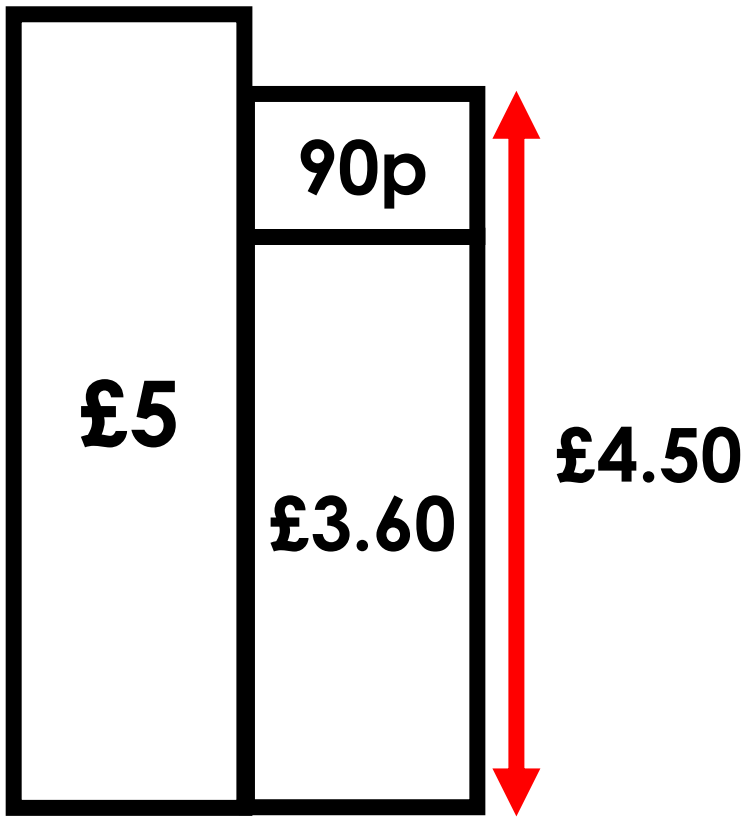
Task 21: Change at the shop

Example answer 2

I buy [2] sandwich(es) and [3] drink(s).

I pay with a £5 note.

I get [ ] change.



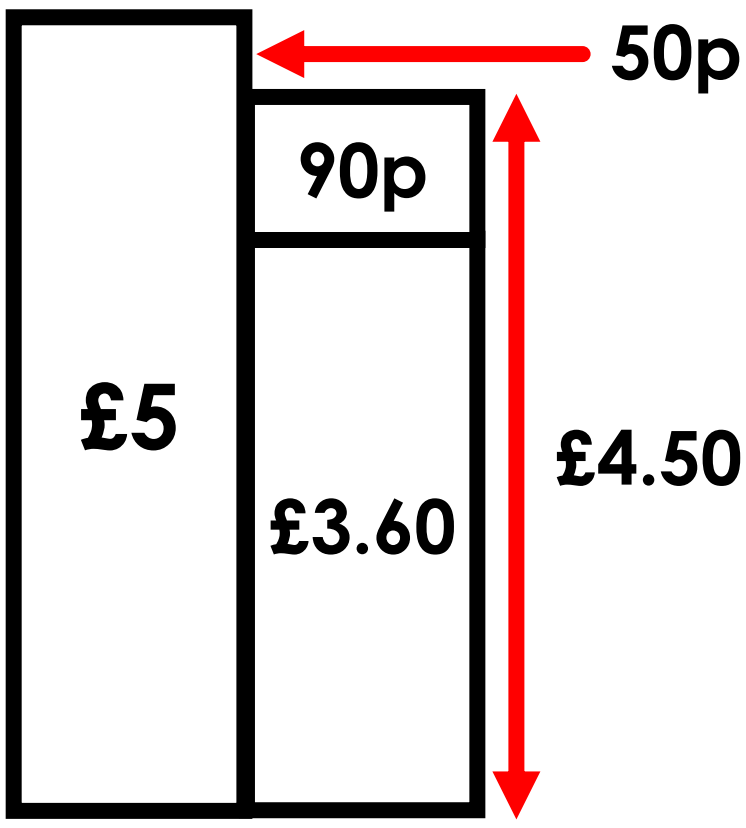
Task 21: Change at the shop

Example answer 2

I buy **2** sandwich(es) and **3** drink(s).

I pay with a £5 note.

I get **50p** change.

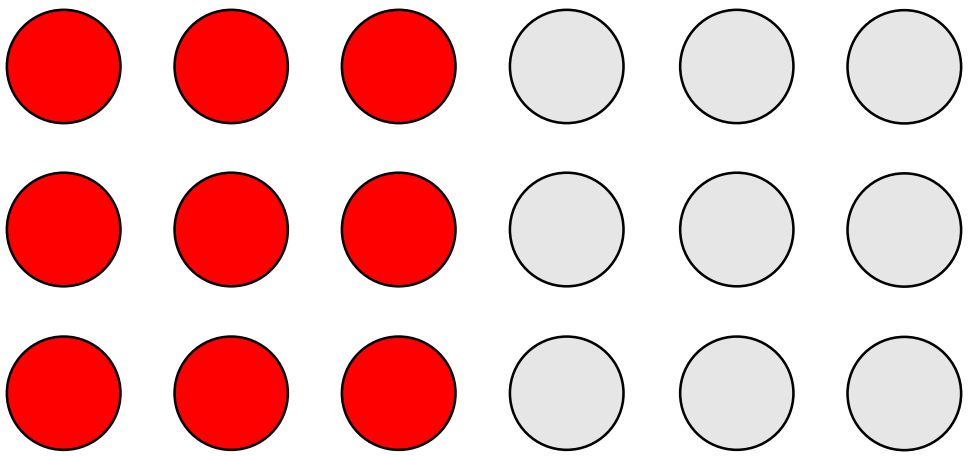


Task 22: × + number sentences

$$6 \times 3$$

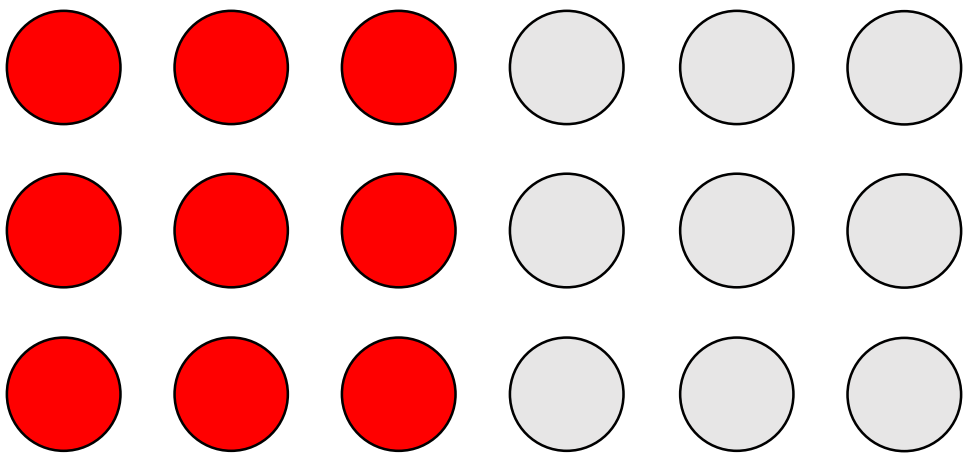
Task 22: × + number sentences

$$6 \times 3$$



Task 22: × + number sentences

6×3



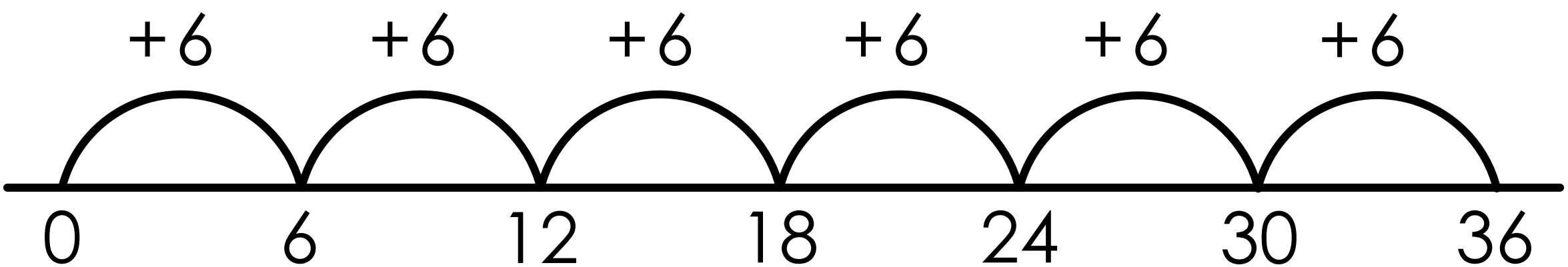
Double 3×3

Task 22: × + number sentences

$$6 \times 6$$

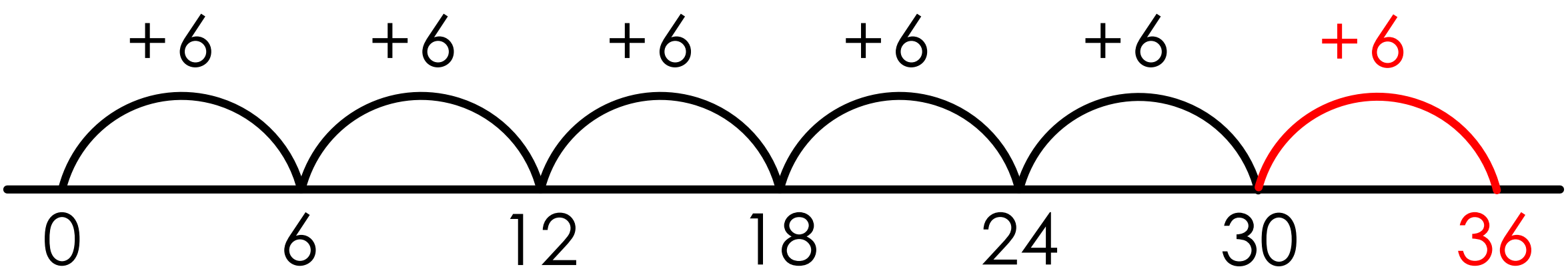
Task 22: × + number sentences

$$6 \times 6$$



Task 22: × + number sentences

$$6 \times 6$$



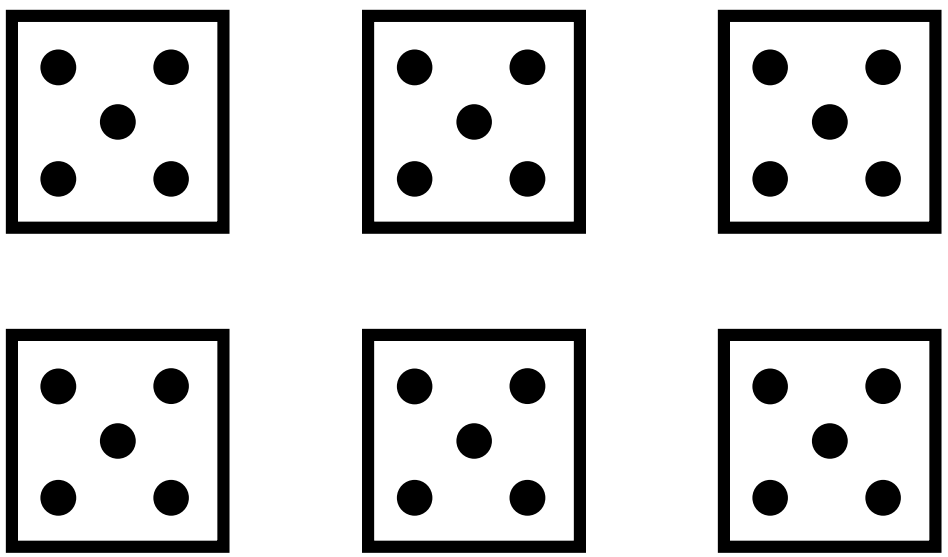
$$5 \times 6 + 6$$

Task 22: × + number sentences

$$6 \times 5$$

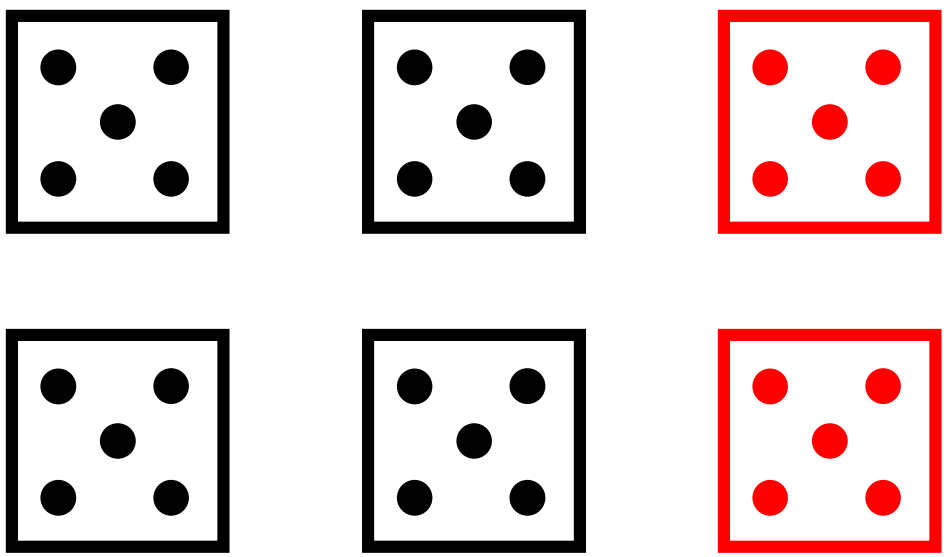
Task 22: × + number sentences

$$6 \times 5$$



Task 22: × + number sentences

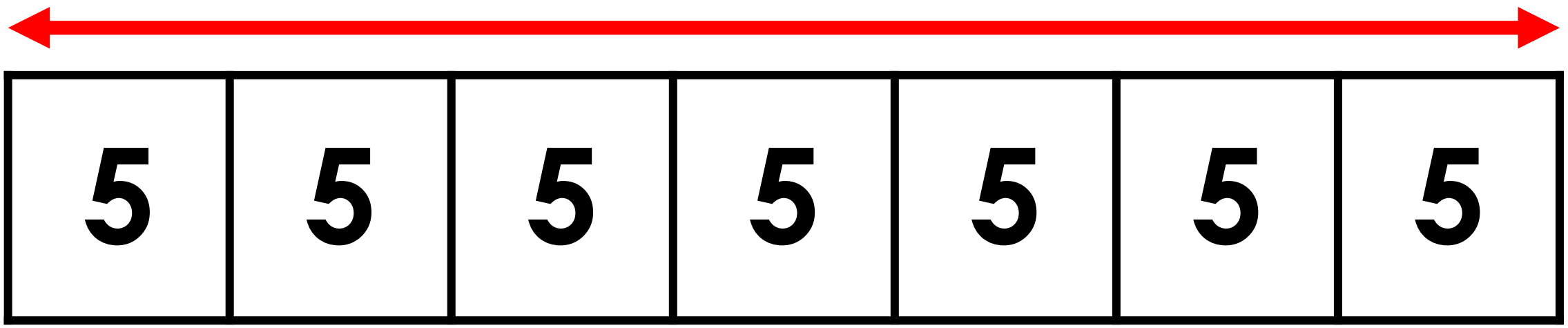
$$6 \times 5$$



$$4 \times 5 + 10$$

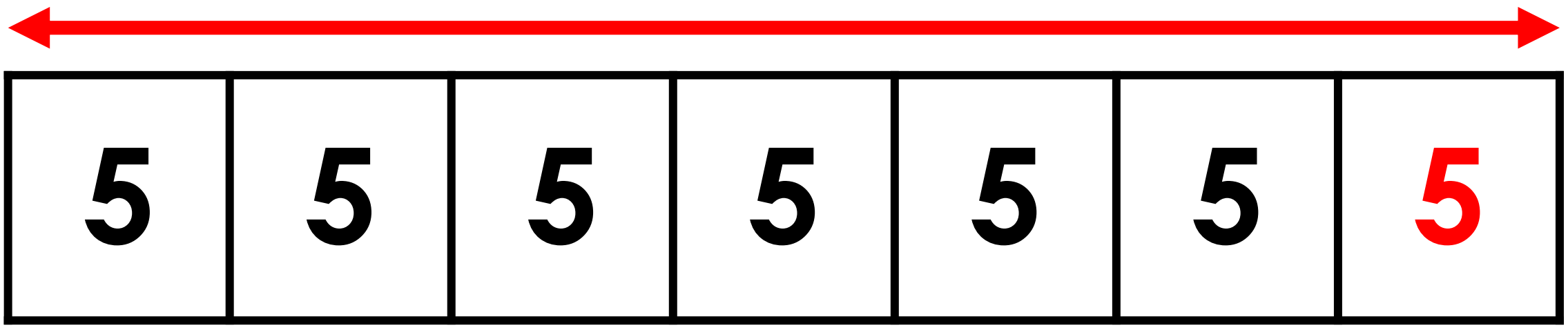
Task 22: × + number sentences

$$7 \times 5$$



Task 22: × + number sentences

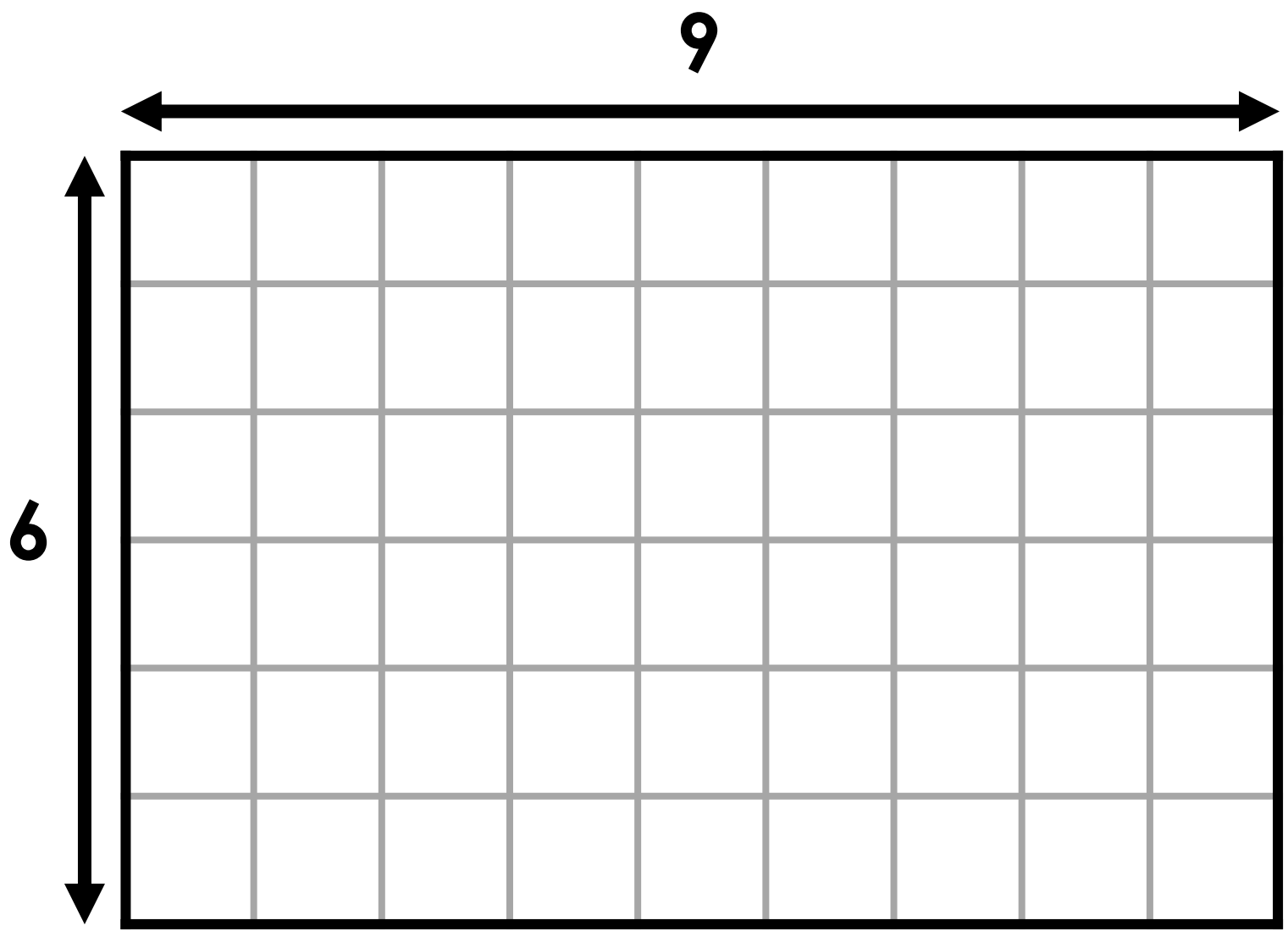
$$7 \times 5$$



$$6 \times 5 + 5$$

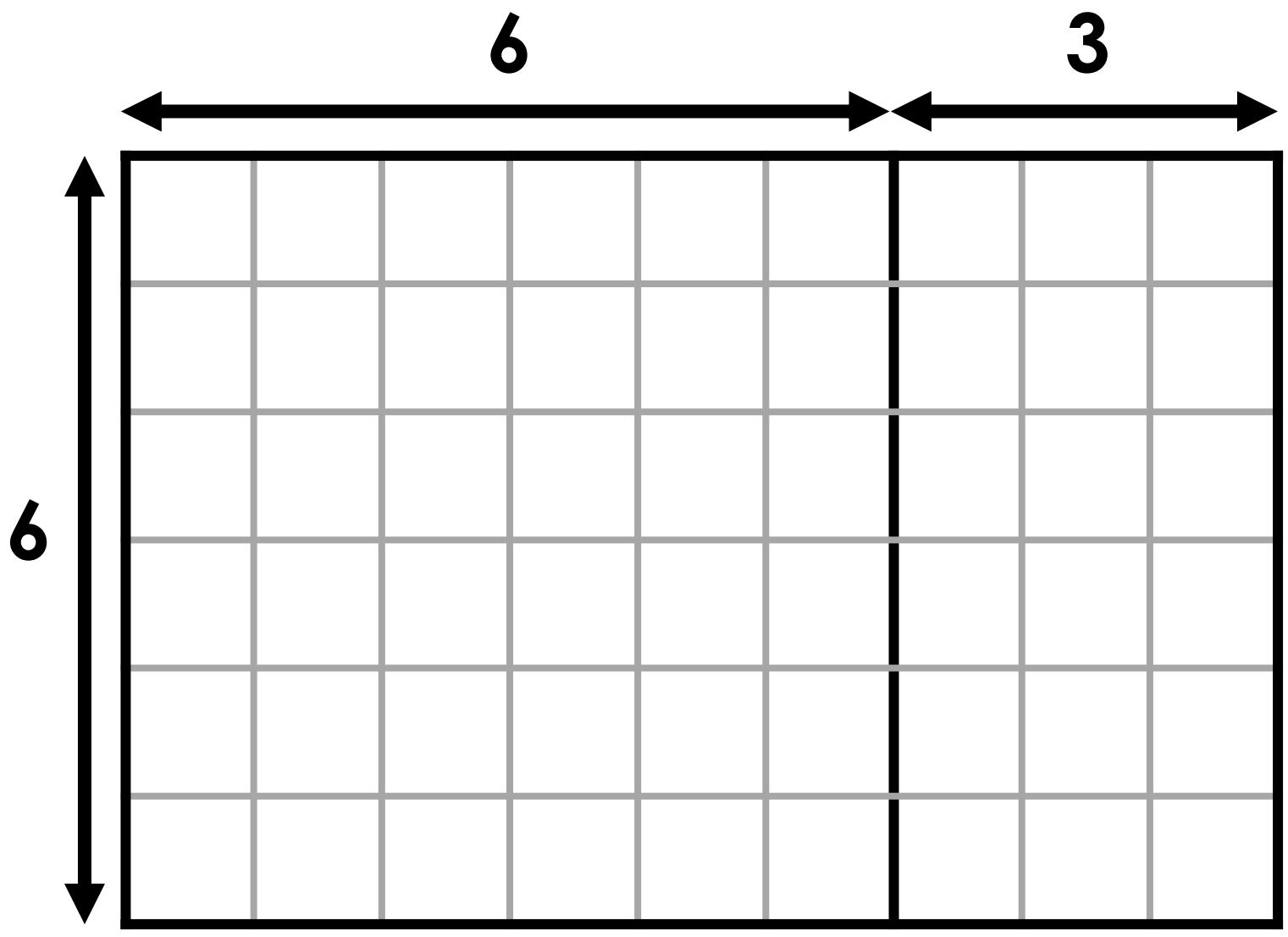
Task 23: Area models

Green Task Example Answers



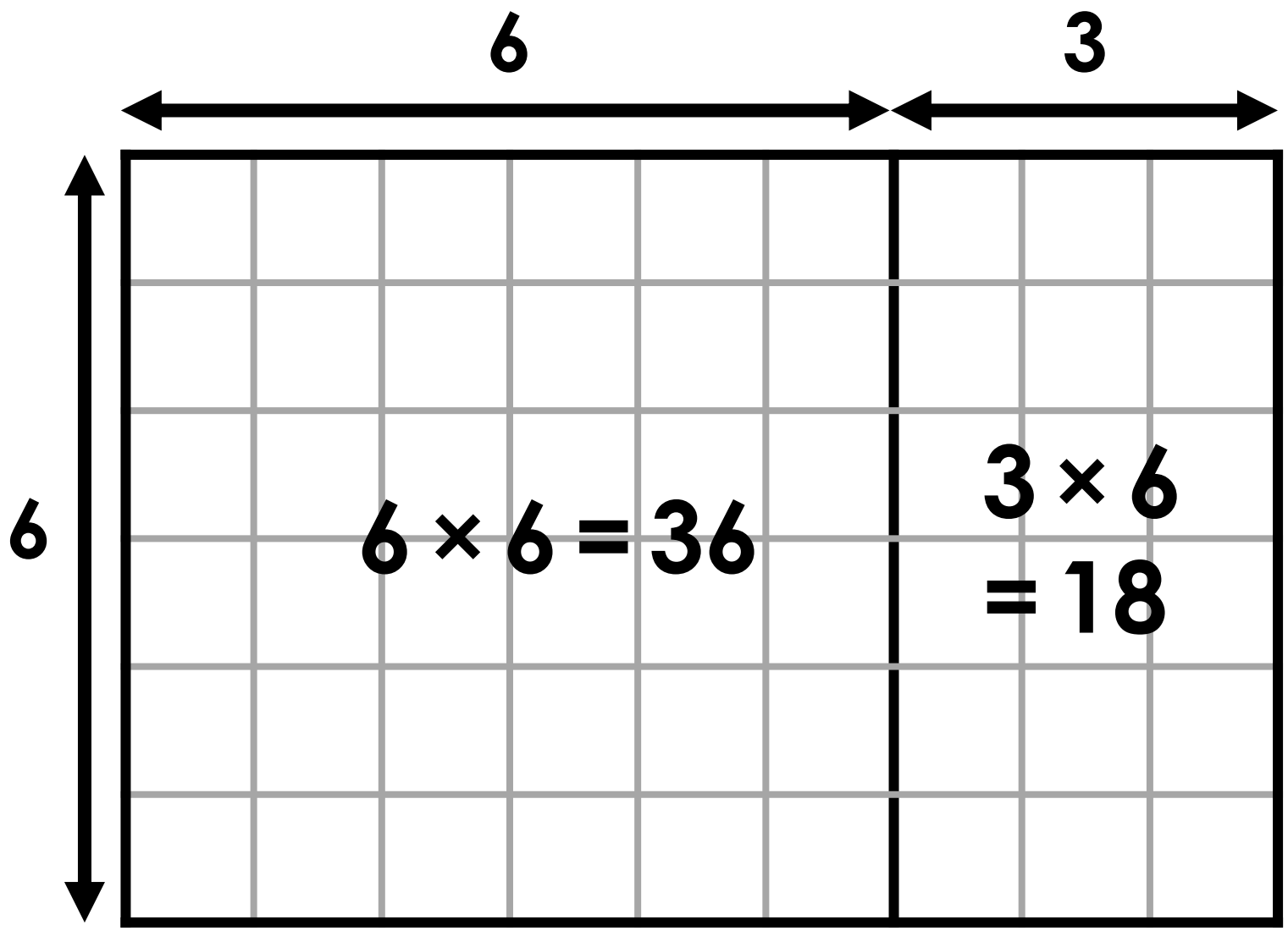
Task 23: Area models

Green Task Example Answers



Task 23: Area models

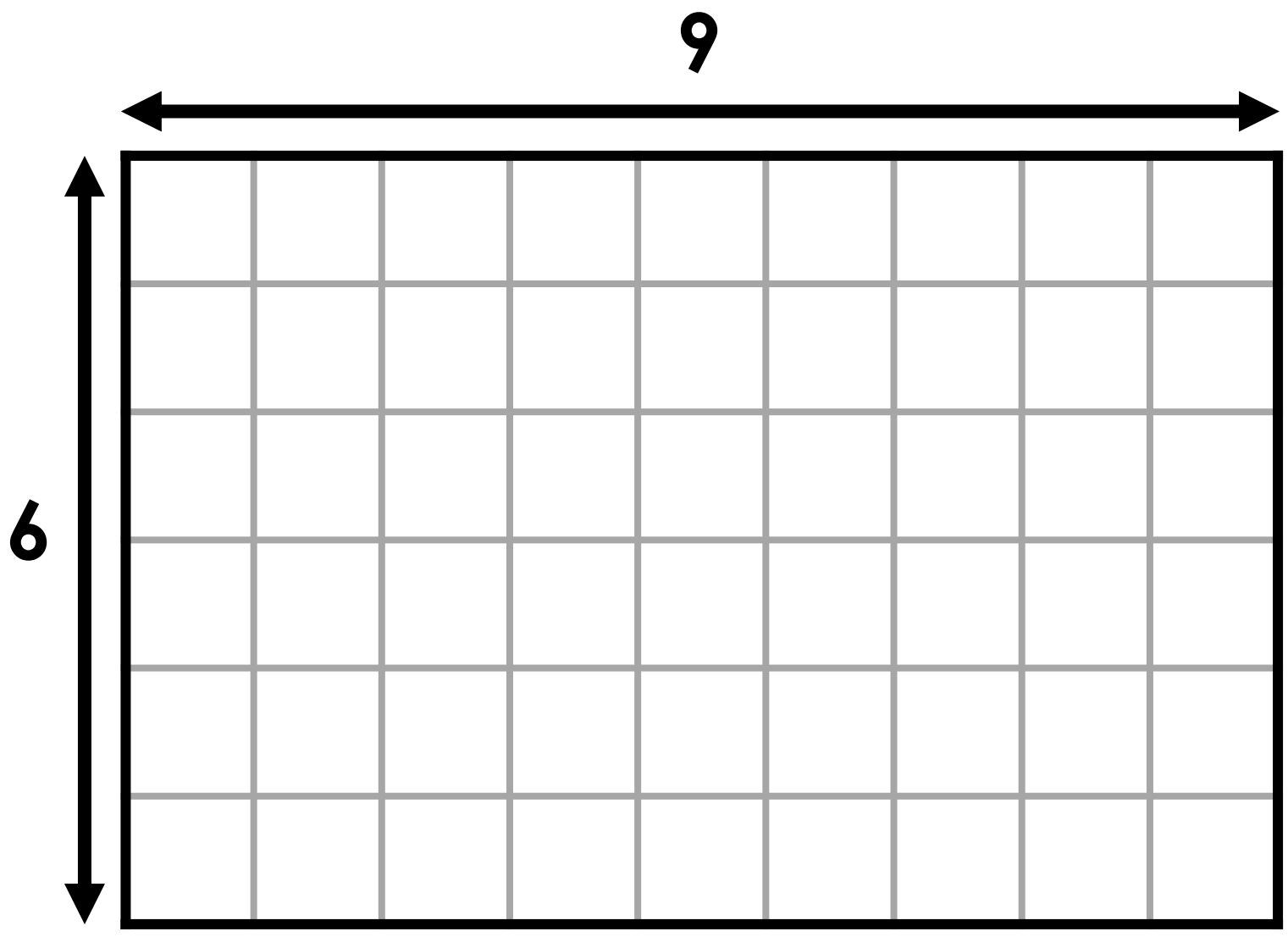
Green Task Example Answers



36 + 18 = 54

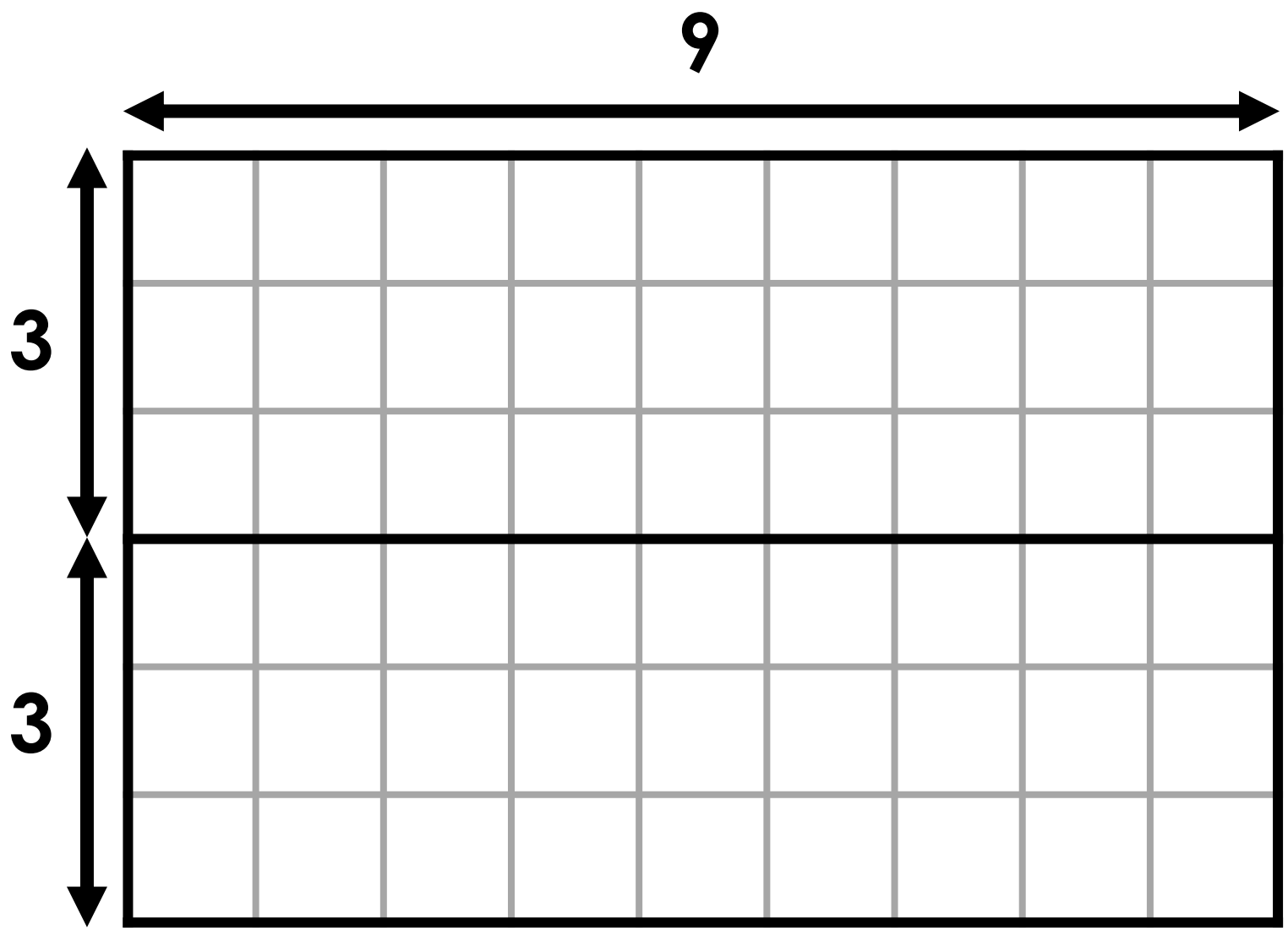
Task 23: Area models

Green Task Example Answers



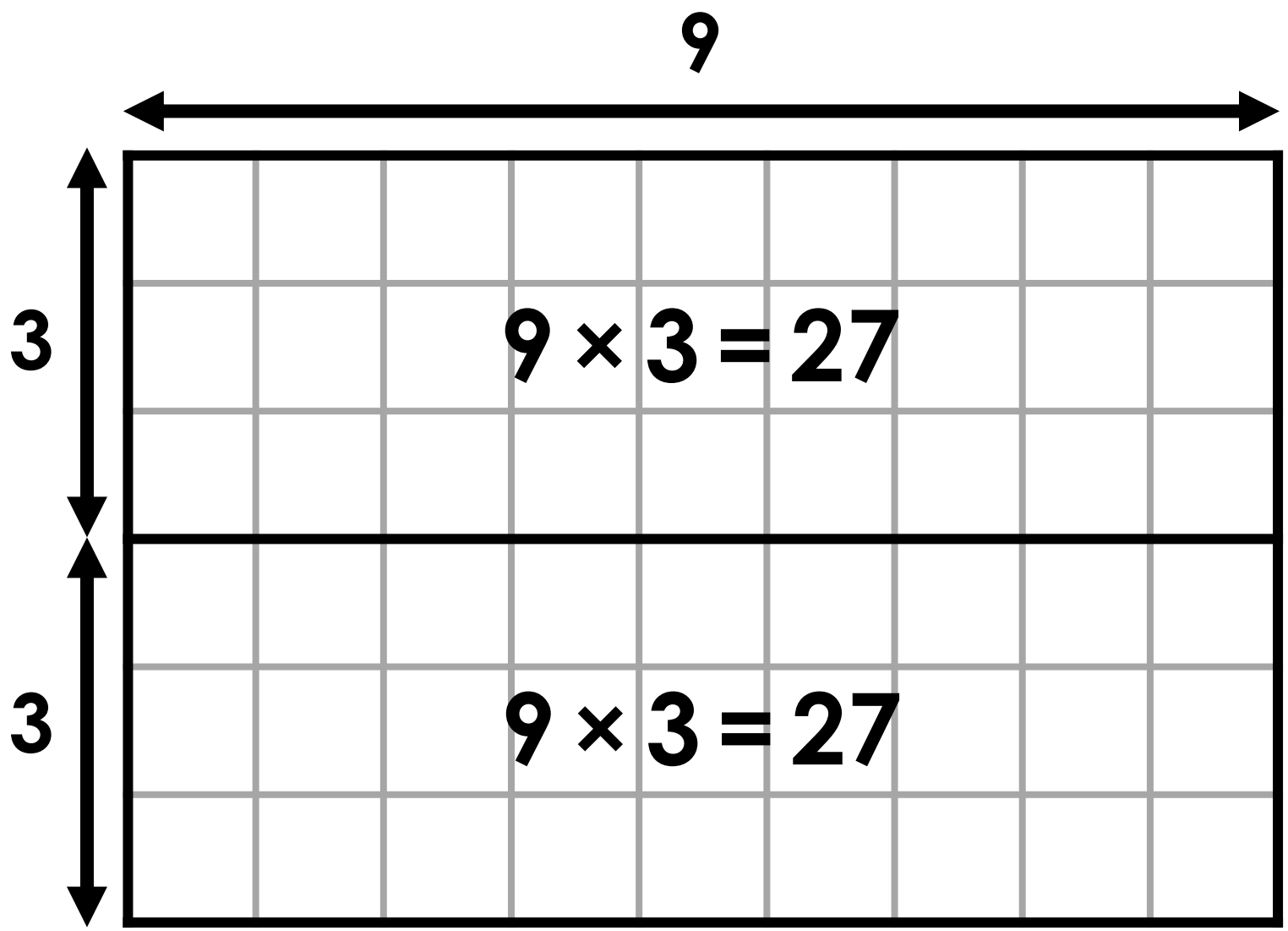
Task 23: Area models

Green Task Example Answers



Task 23: Area models

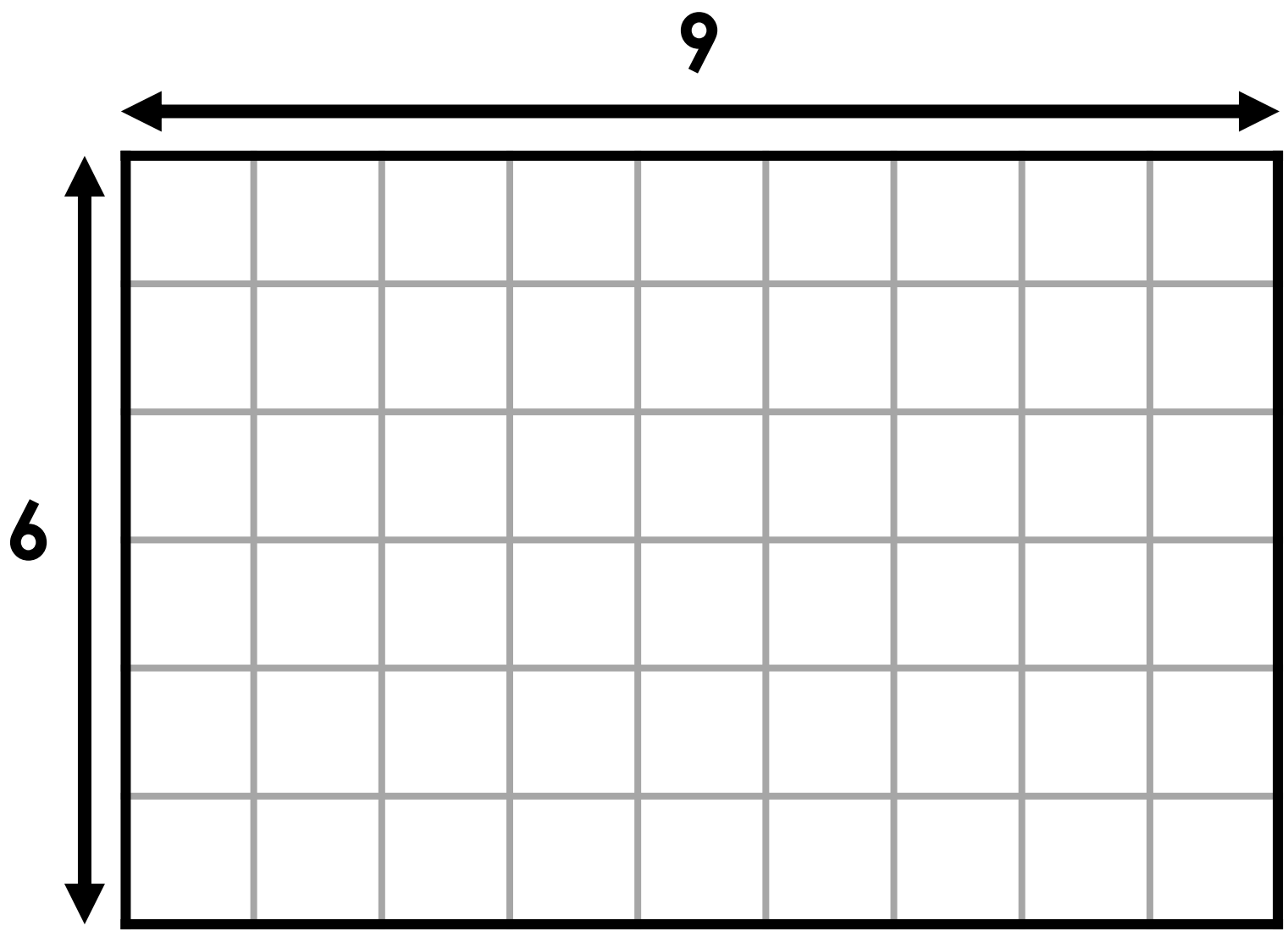
Green Task Example Answers



27 + 27 = 54

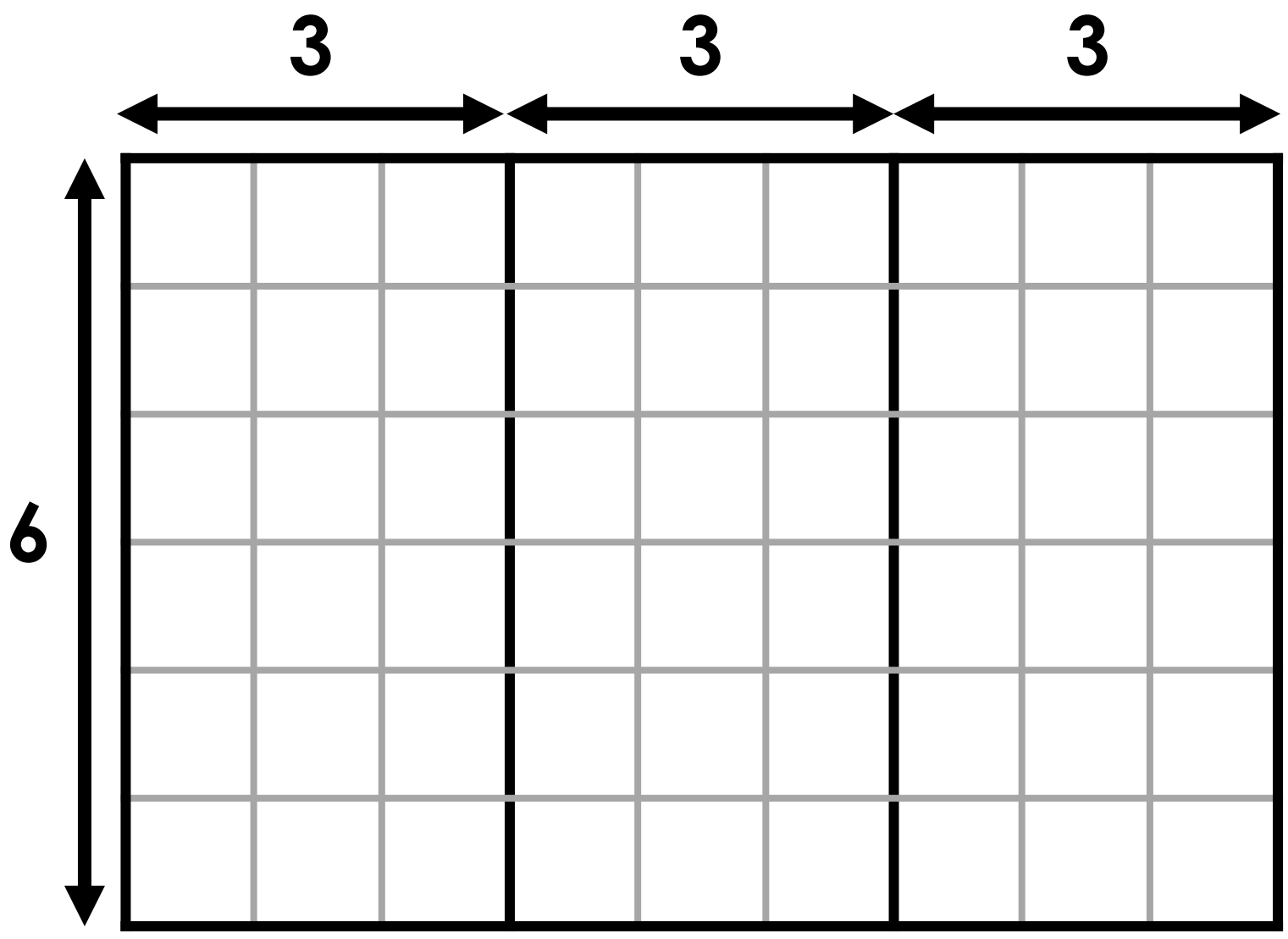
Task 23: Area models

Green Task Example Answers



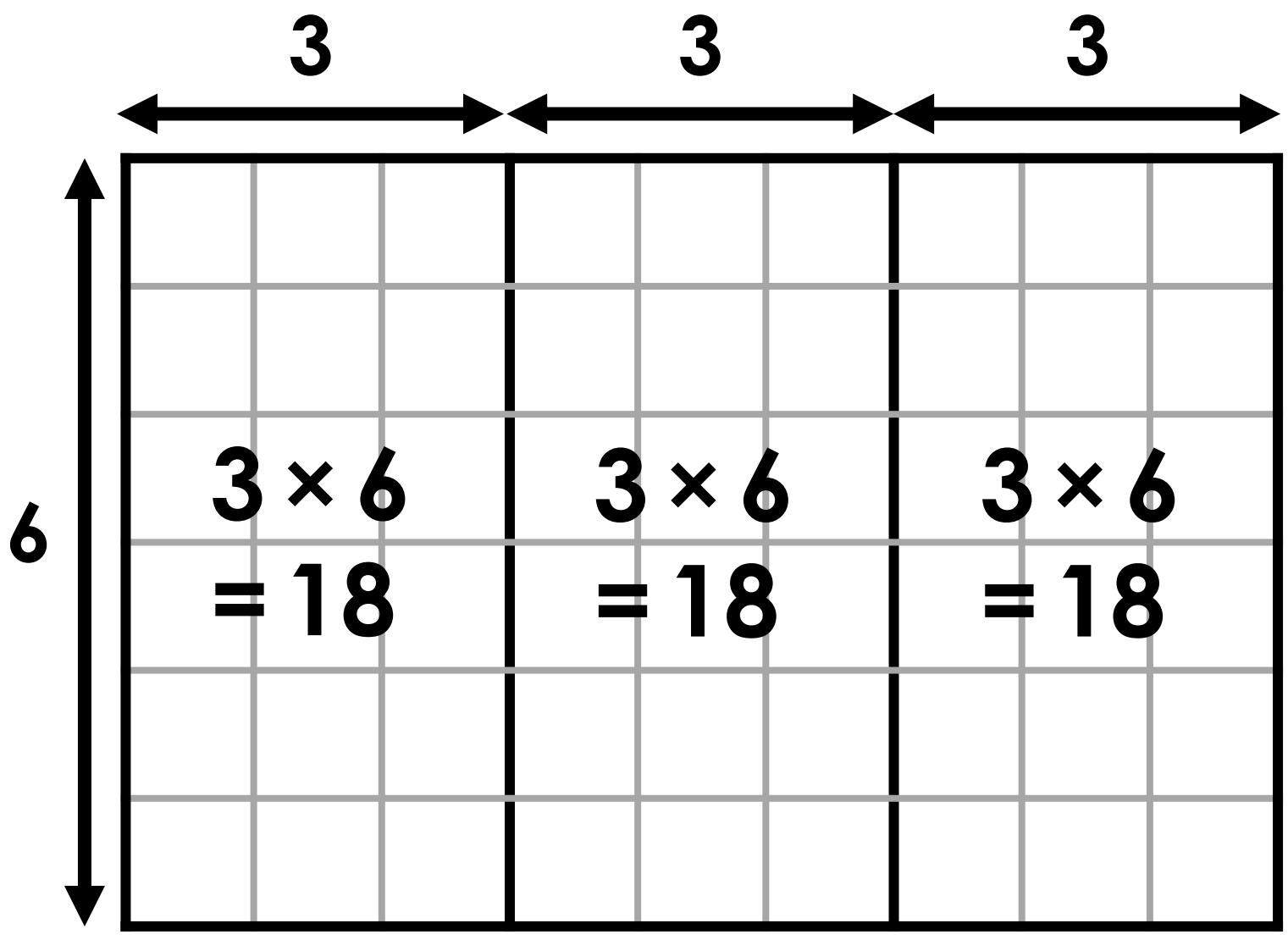
Task 23: Area models

Green Task Example Answers



Task 23: Area models

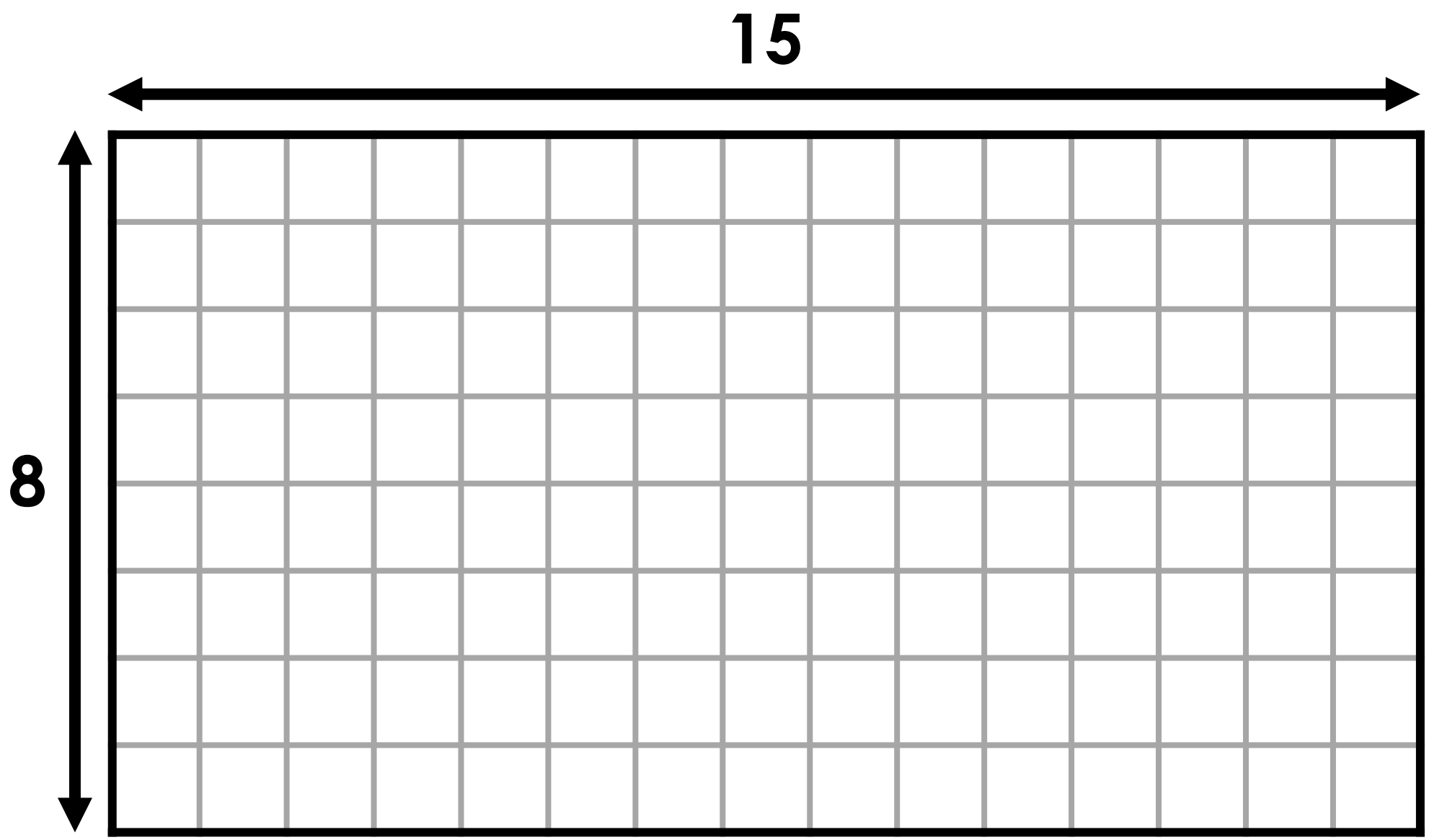
Green Task Example Answers



18 + 18 + 18 = 54

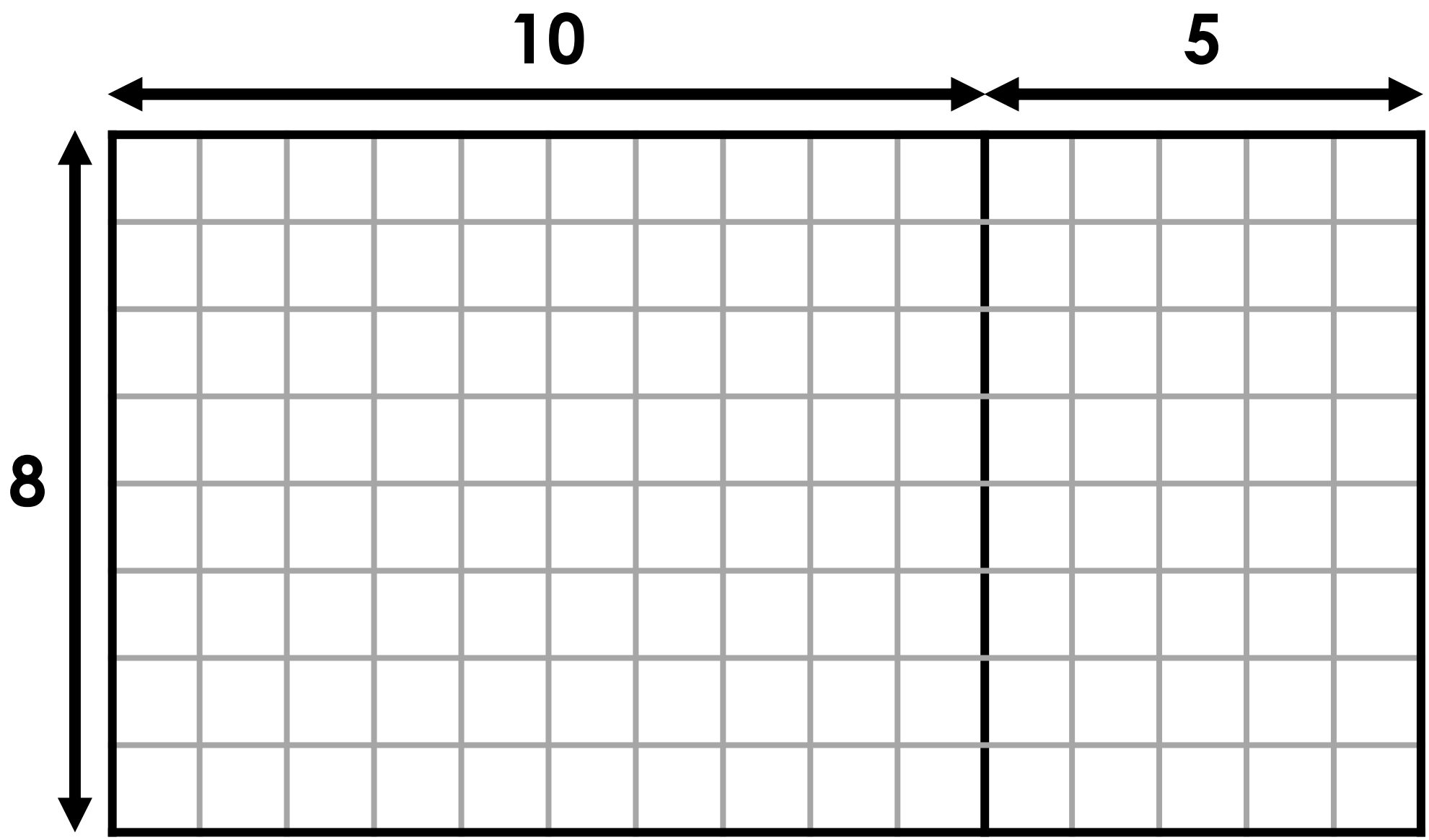
Task 23: Area models

Yellow Task Example Answers



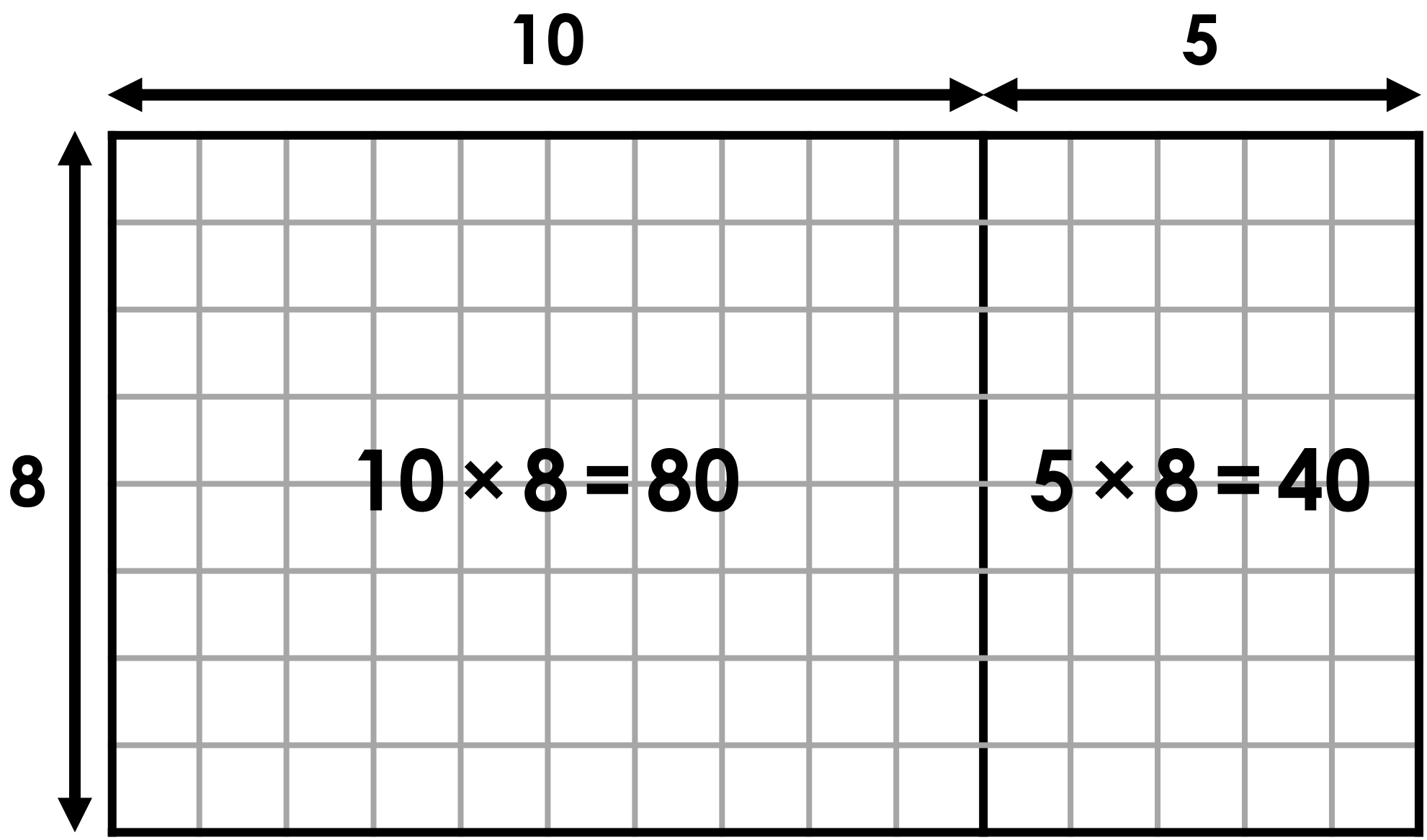
Task 23: Area models

Yellow Task Example Answers



Task 23: Area models

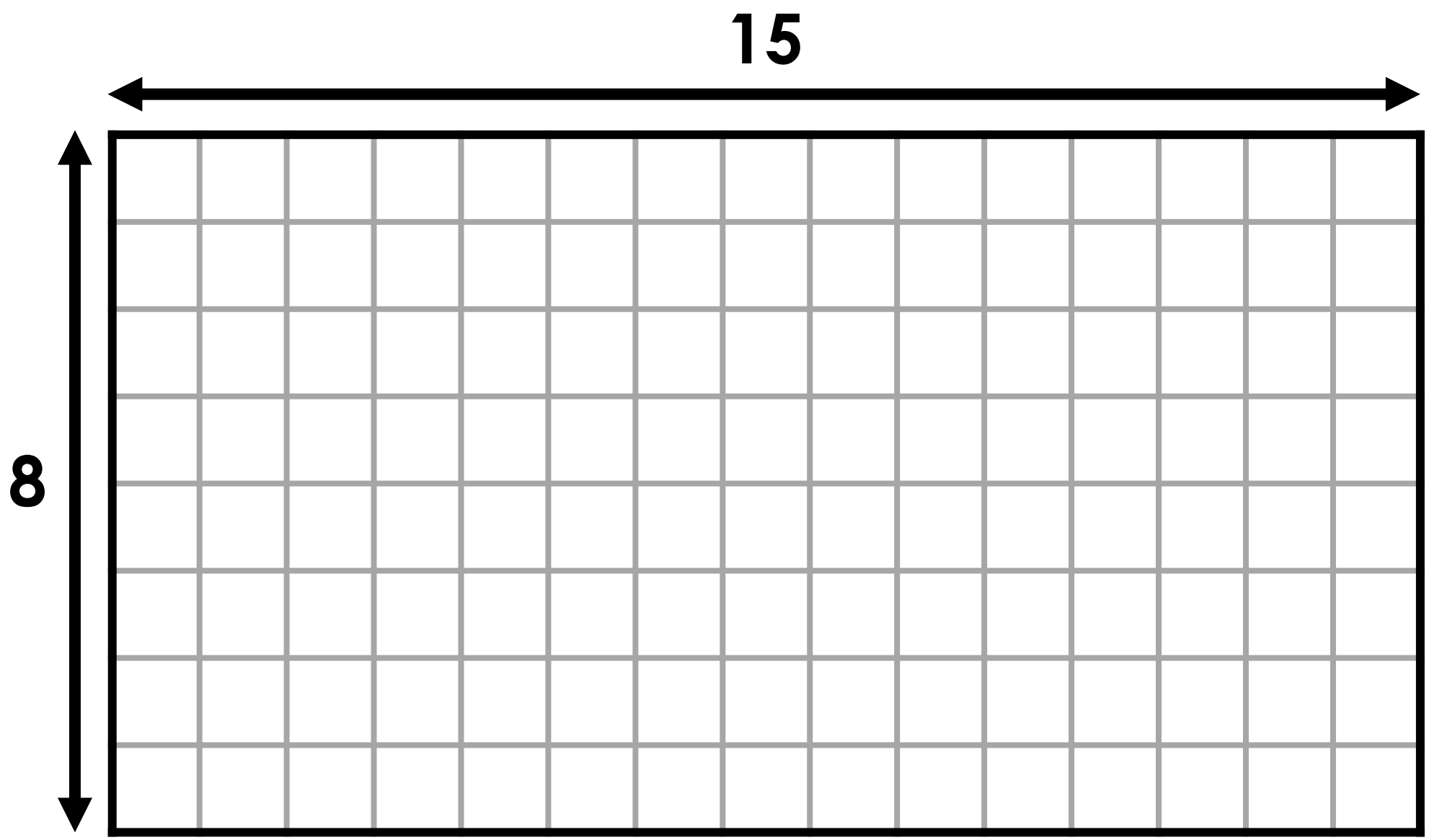
Yellow Task Example Answers



80 + 40 = 120

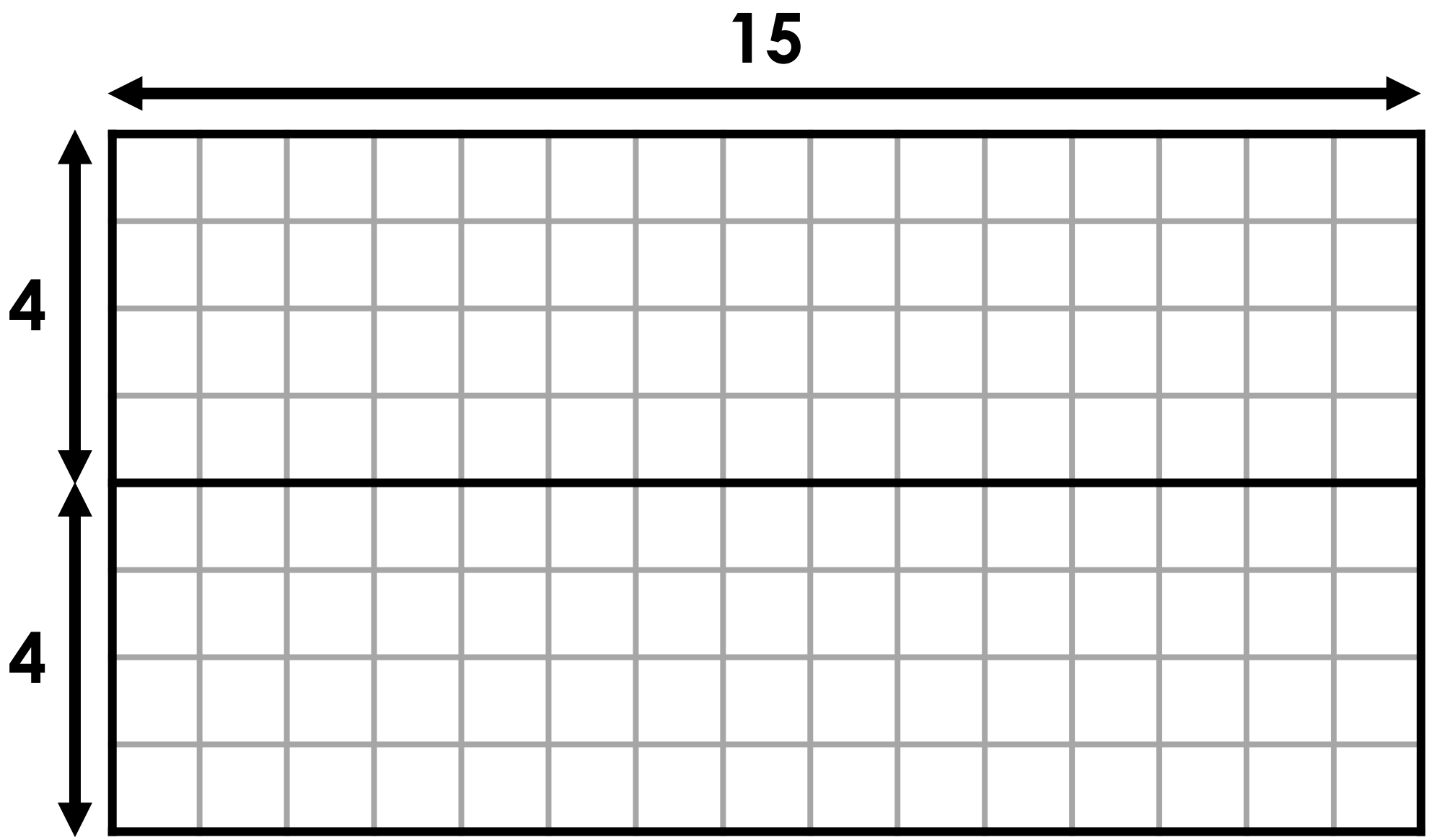
Task 23: Area models

Yellow Task Example Answers



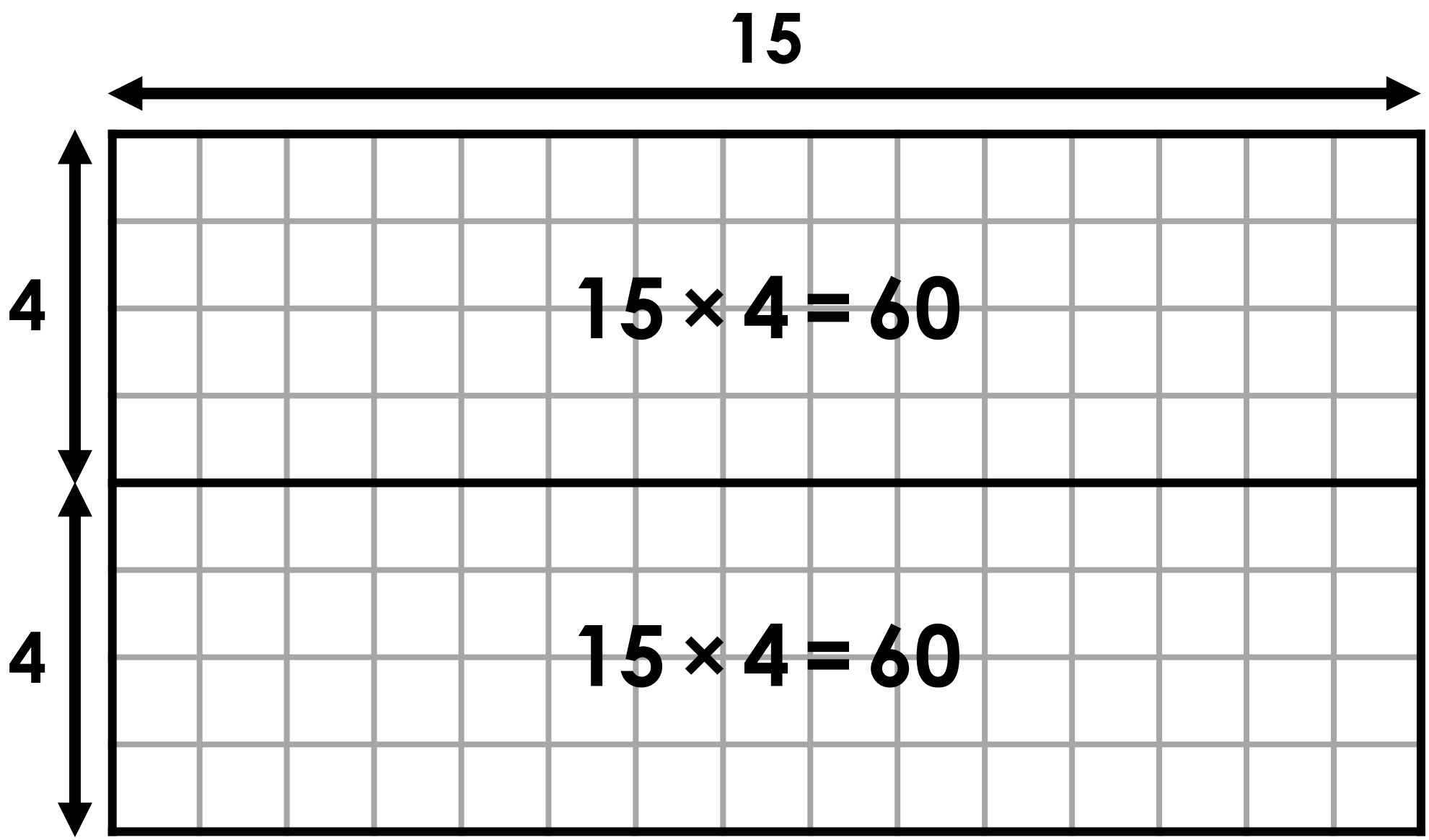
Task 23: Area models

Yellow Task Example Answers



Task 23: Area models

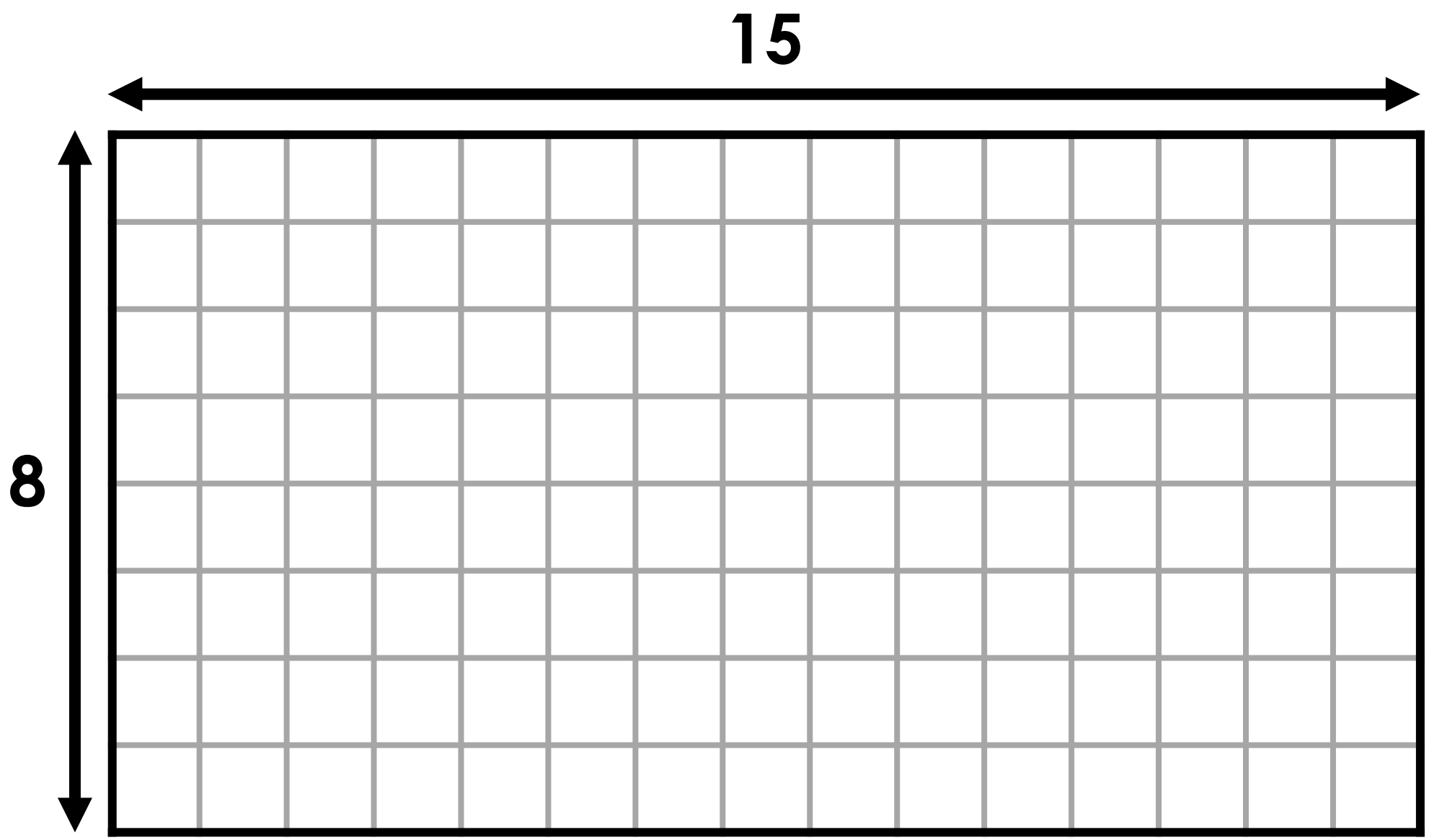
Yellow Task Example Answers



60 + 60 = 120

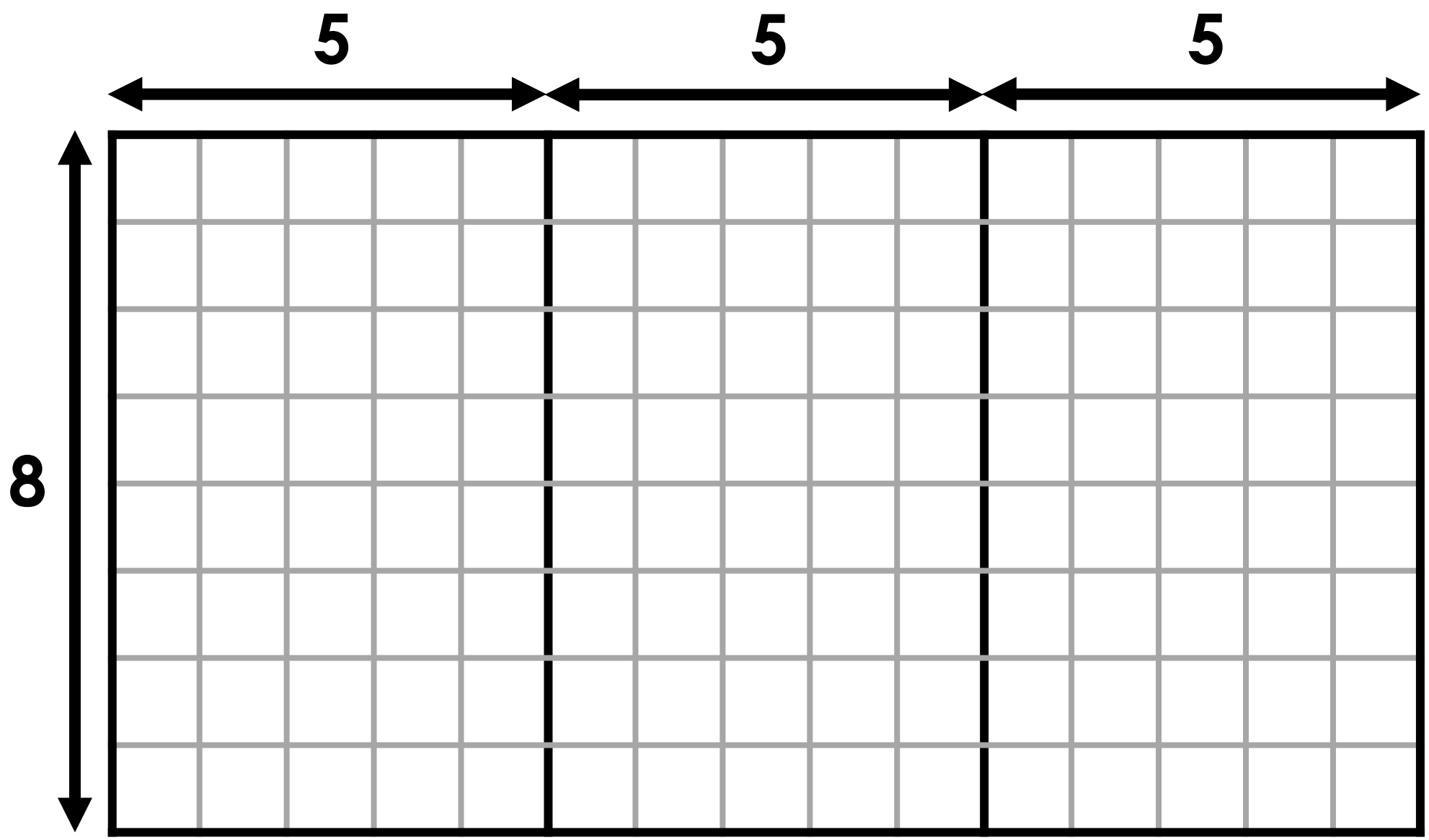
Task 23: Area models

Yellow Task Example Answers



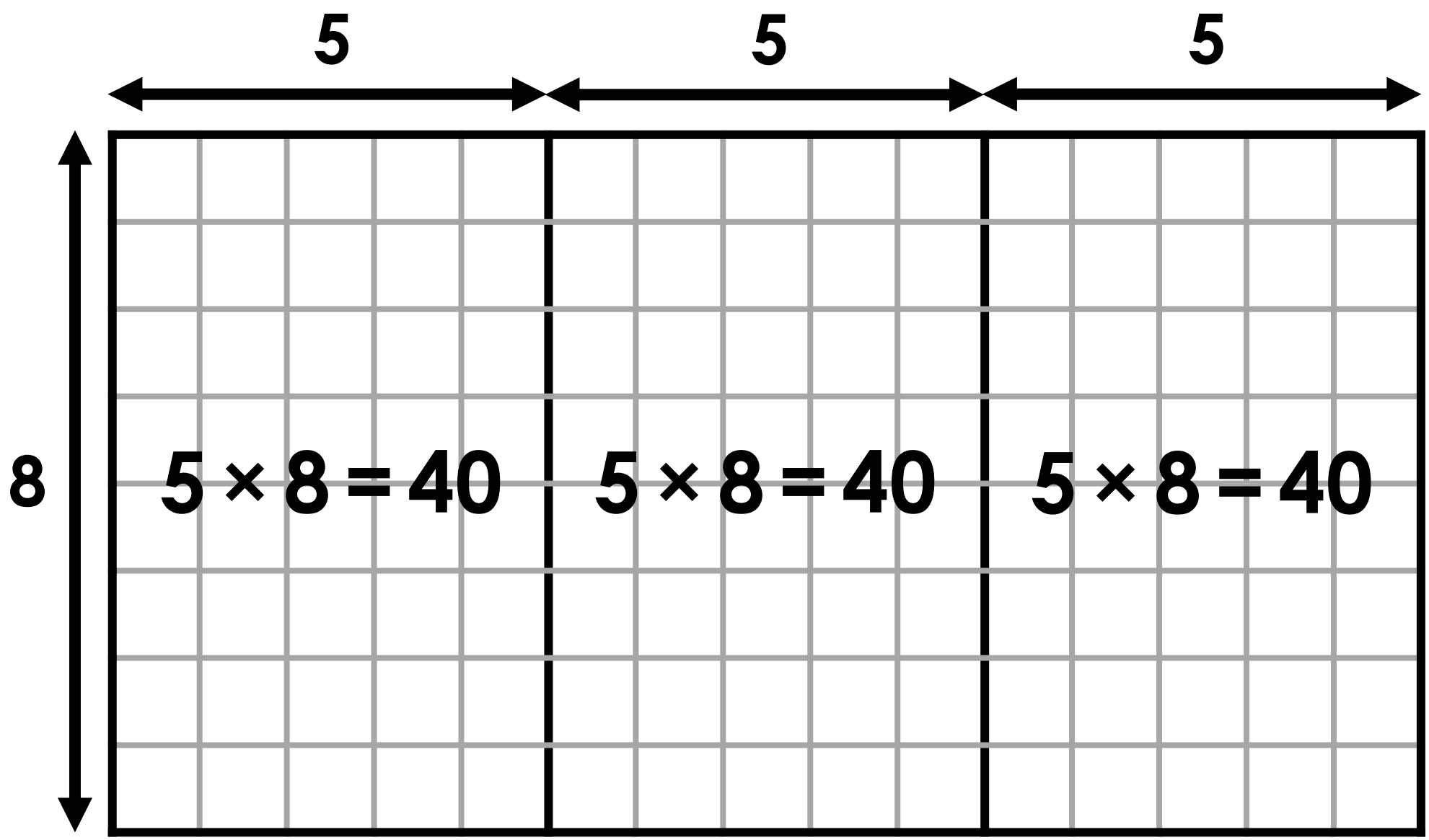
Task 23: Area models

Yellow Task Example Answers



Task 23: Area models

Yellow Task Example Answers



40 + 40 + 40 = 120

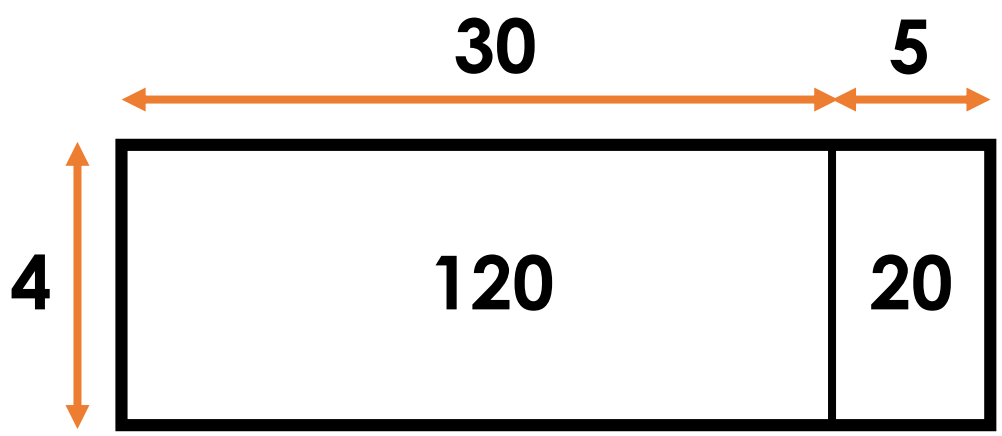
Task 24: Largest product

□□ × □ =

3 4 5

Task 24: Largest product

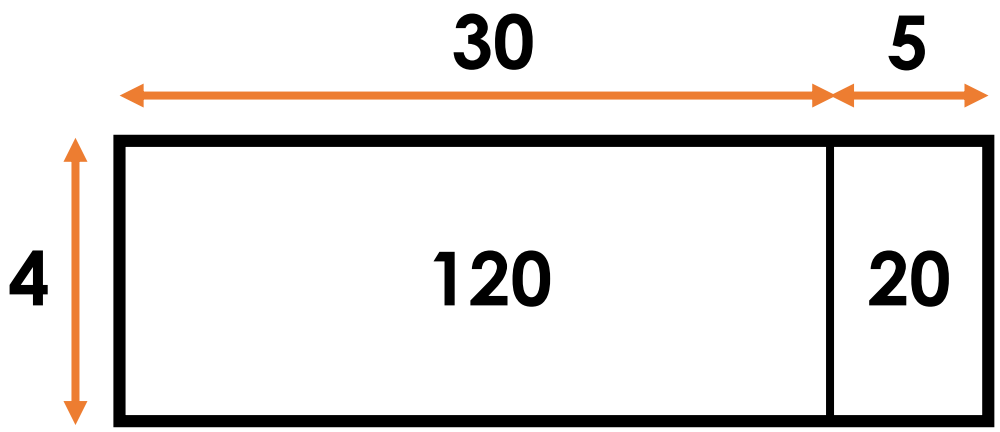
$$\boxed{3}\,\boxed{5} \times \boxed{4} = 140$$



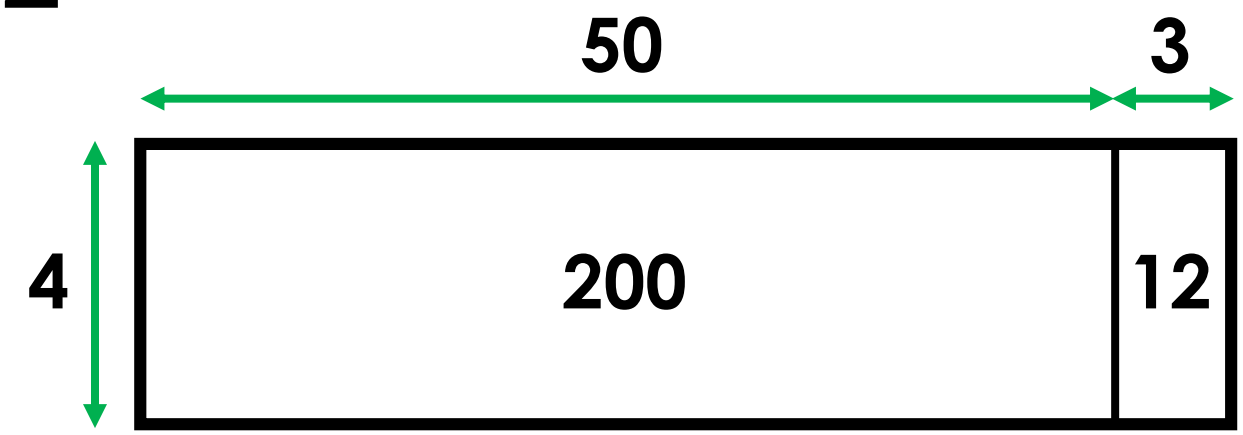
$35 \times 4 = 140$

Task 24: Largest product

$$\boxed{5}\ \boxed{3} \times \boxed{4} = 212$$



$35 \times 4 = 140$

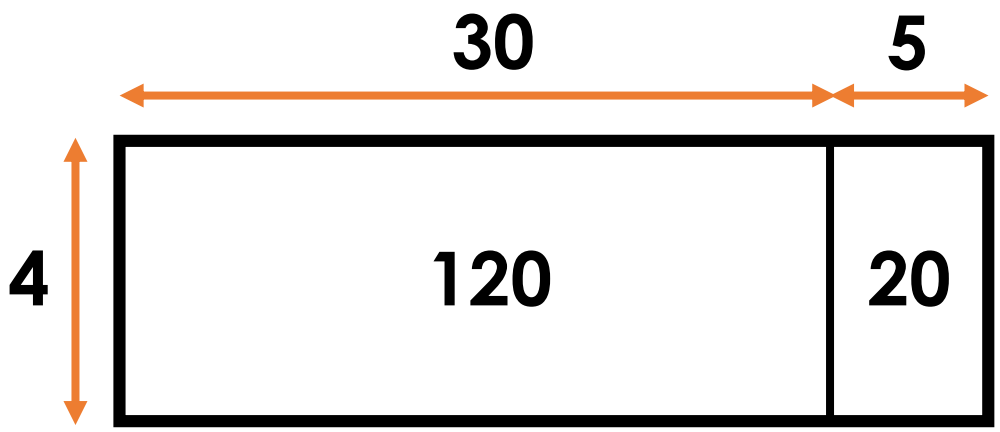


$53 \times 4 = 212$

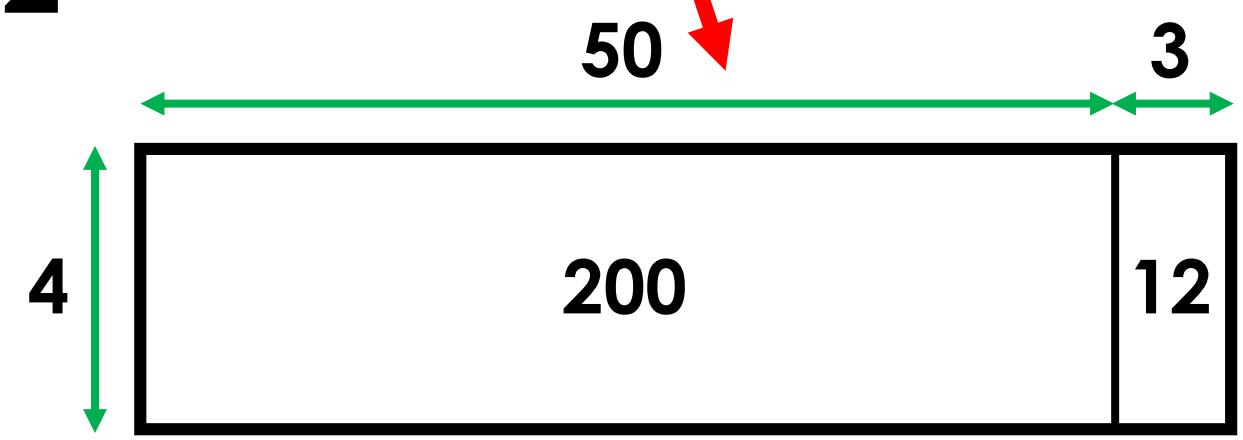
Task 24: Largest product

Larger as 53 is more than 35

$$\boxed{5}\ \boxed{3} \times \boxed{4} = 212$$



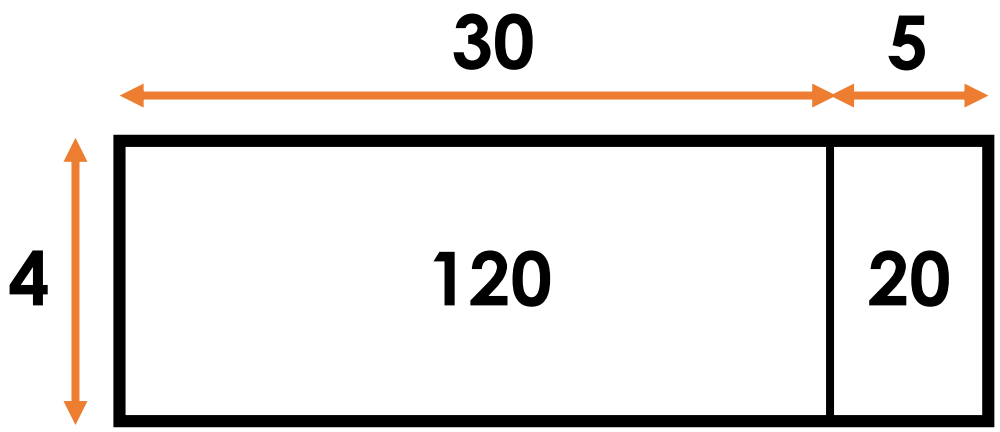
35 × 4 = 140



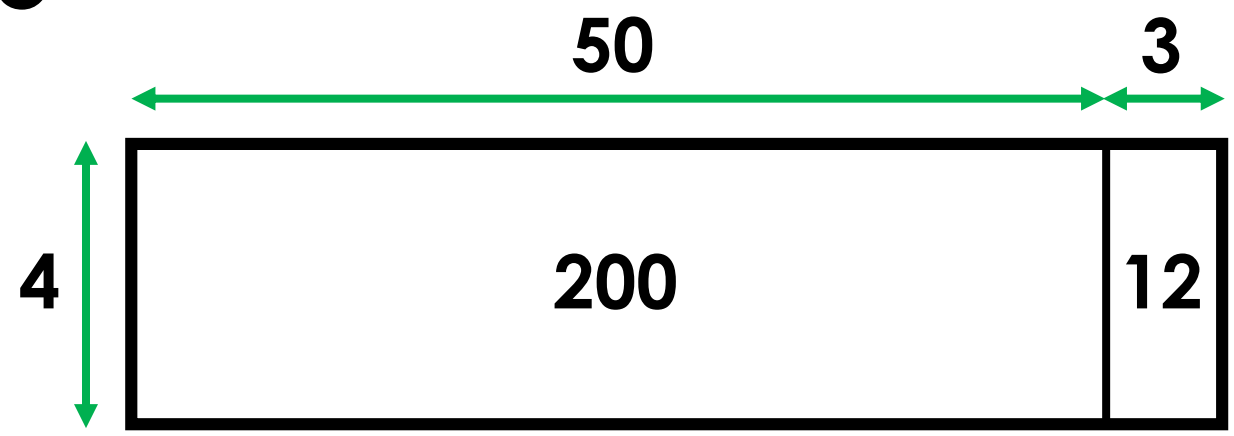
53 × 4 = 212

Task 24: Largest product

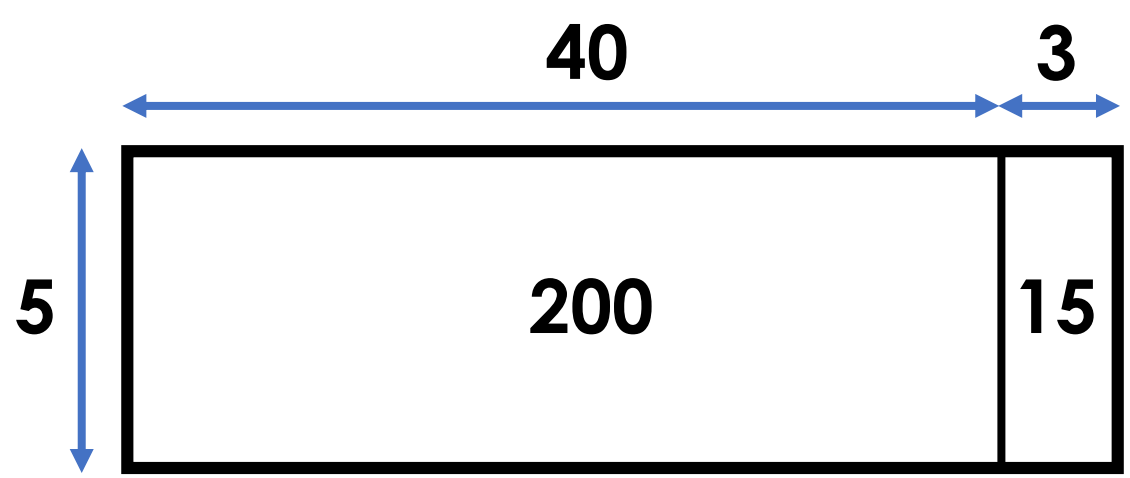
$$\boxed{4}\,\boxed{3} \times \boxed{5} = 215$$



35 × 4 = 140



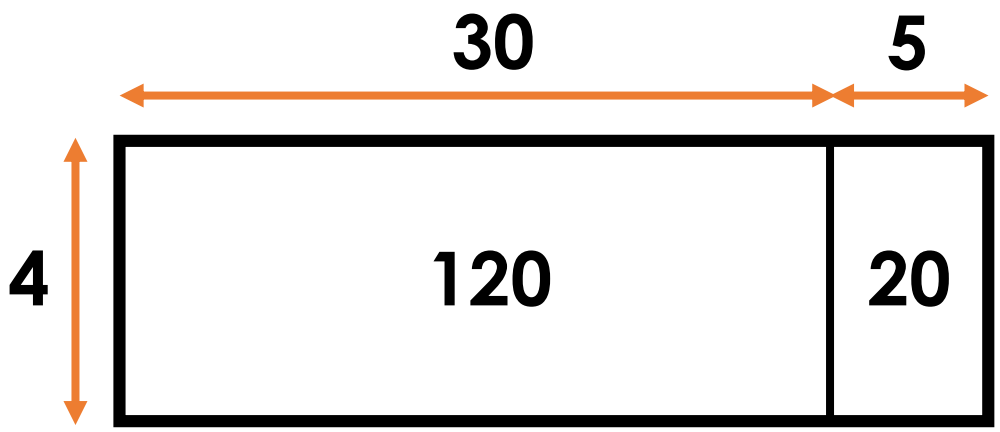
53 × 4 = 212



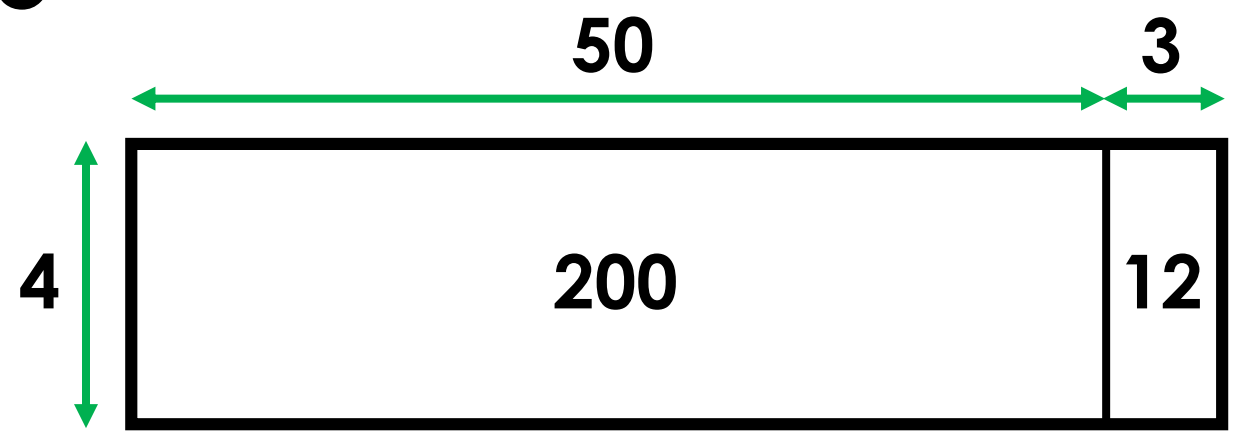
43 × 5 = 215

Task 24: Largest product

$\boxed{4}\ \boxed{3} \times \boxed{5} = 215$

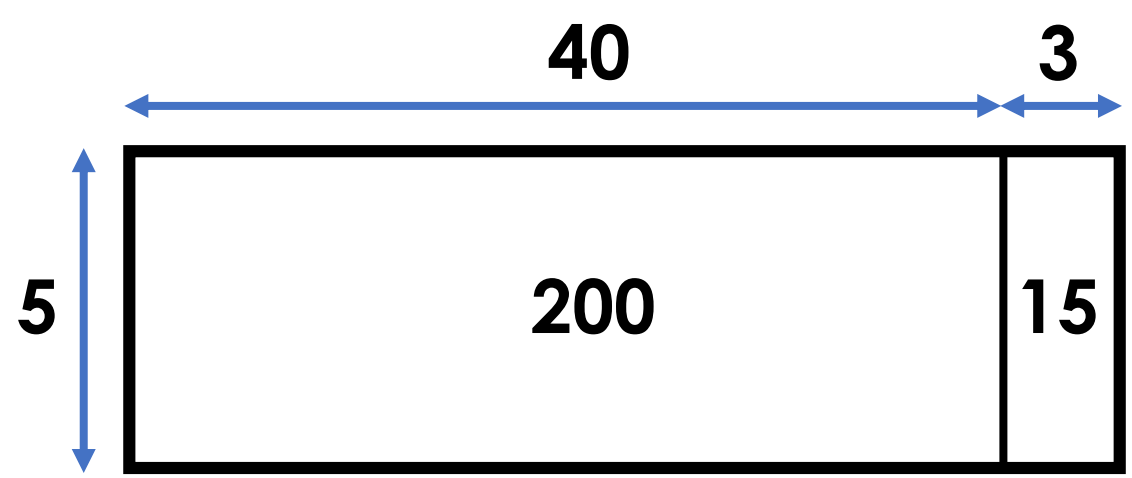


35 × 4 = 140



53 × 4 = 212

Larger as the 3 is multiplied by more



43 × 5 = 215

Task 25: 2-digit product

□ 3 × □ = □ □

1 2 4 5 6 7 8 9

Task 25: 2-digit product

Answers when multiplying by 2:

□ 3 × 2 = □ □

1

4 5 6 7 8 9

Task 25: 2-digit product

Answers when multiplying by 2:

1 3 × 2 = ☐☐

4 5 6 7 8 9

Task 25: 2-digit product

Answers when multiplying by 2:

1 3 × 2 = ☐☐

Not an answer:

13 × 2 = 26

Uses 2 twice

4 5 6 7 8 9

Task 25: 2-digit product

Answers when multiplying by 2:

4 3 × 2 = ☐ ☐

1

5 6 7 8 9

Task 25: 2-digit product

Answers when multiplying by 2:

4 3 × 2 = 8 6

1 5 7 9

43 × 2 = 86

Task 25: 2-digit product

Answers when multiplying by 2:

5 3 × 2 = ☐☐

1 4 6 7 8 9

43 × 2 = 86

Task 25: 2-digit product

Answers when multiplying by 2:

5 3 × 2 = ☐☐

Not an answer:

53 × 2 = 106

3-digit number

1 4 6 7 8 9

43 × 2 = 86

Task 25: 2-digit product

Answers when multiplying by 4:

□ 3 × 4 = □ □

1 2 5 6 7 8 9

43 × 2 = 86

Task 25: 2-digit product

Answers when multiplying by 4:

1 3 × 4 = ☐☐

2 5 6 7 8 9

43 × 2 = 86

Task 25: 2-digit product

Answers when multiplying by 4:

1	3	×	4	=	5	2

6	7	8	9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 4:

2	3	×	4	=		

1

5 6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 4:

2 3 × 4 = □□

Not an answer:

23 × 4 = 92

Uses 2 twice

1

5 6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 4:

5 3 × 4 = ☐☐

1 2

6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 4:

5 3 × 4 = □□

Not an answer:

53 × 4 = 212

3-digit number

1 2

6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 5:

□ 3 × 5 = □ □

1 2 4 6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 5:

	3	×	5	=		

Not possible:

Will always use 5 twice

1 2 4 6 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 6:

☐ 3 × 6 = ☐☐

1 2 4 5 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 6:

1 3 × 6 = ☐☐

2 4 5 7 8 9

43 × 2 = 86

13 × 4 = 52

Task 25: 2-digit product

Answers when multiplying by 6:

1 3 × 6 = 7 8

2 4 5 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 6:

2	3	×	6	=		

1

4 5

7 8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 6:

2 3 × 6 = □□

Not an answer:

23 × 6 = 138

3-digit number

1

4 5

7 8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 7:

□ 3 × 7 = □ □

1 2 4 5 6 8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 7:

1 3 × 7 = ☐☐

2 4 5 6 8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 7:

1 3 × 7 = □□

Not an answer:

13 × 7 = 91

Uses 1 twice

2 4 5 6 8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 7:

2 3 × 7 = ☐☐

1

4 5 6

8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 7:

2 3 × 7 = ☐☐

Not an answer:

23 × 7 = 161

3-digit number

1

4 5 6

8 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 8:

□ 3 × 8 = □ □

1 2 4 5 6 7 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 8:

1 3 × 8 = □□

Not an answer:

13 × 8 = 104

3-digit number

2 4 5 6 7 9

43 × 2 = 86

13 × 4 = 52

13 × 6 = 78

Task 25: 2-digit product

Answers when multiplying by 8:

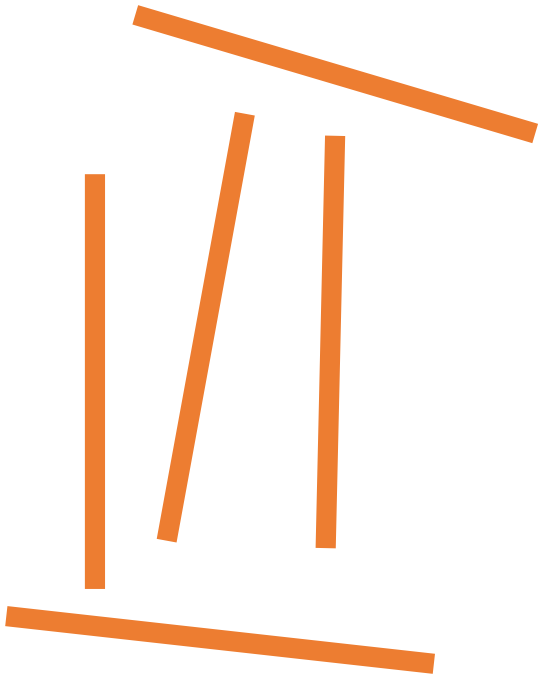
1 3 × 8 = □□

2 4 5 6 7 9

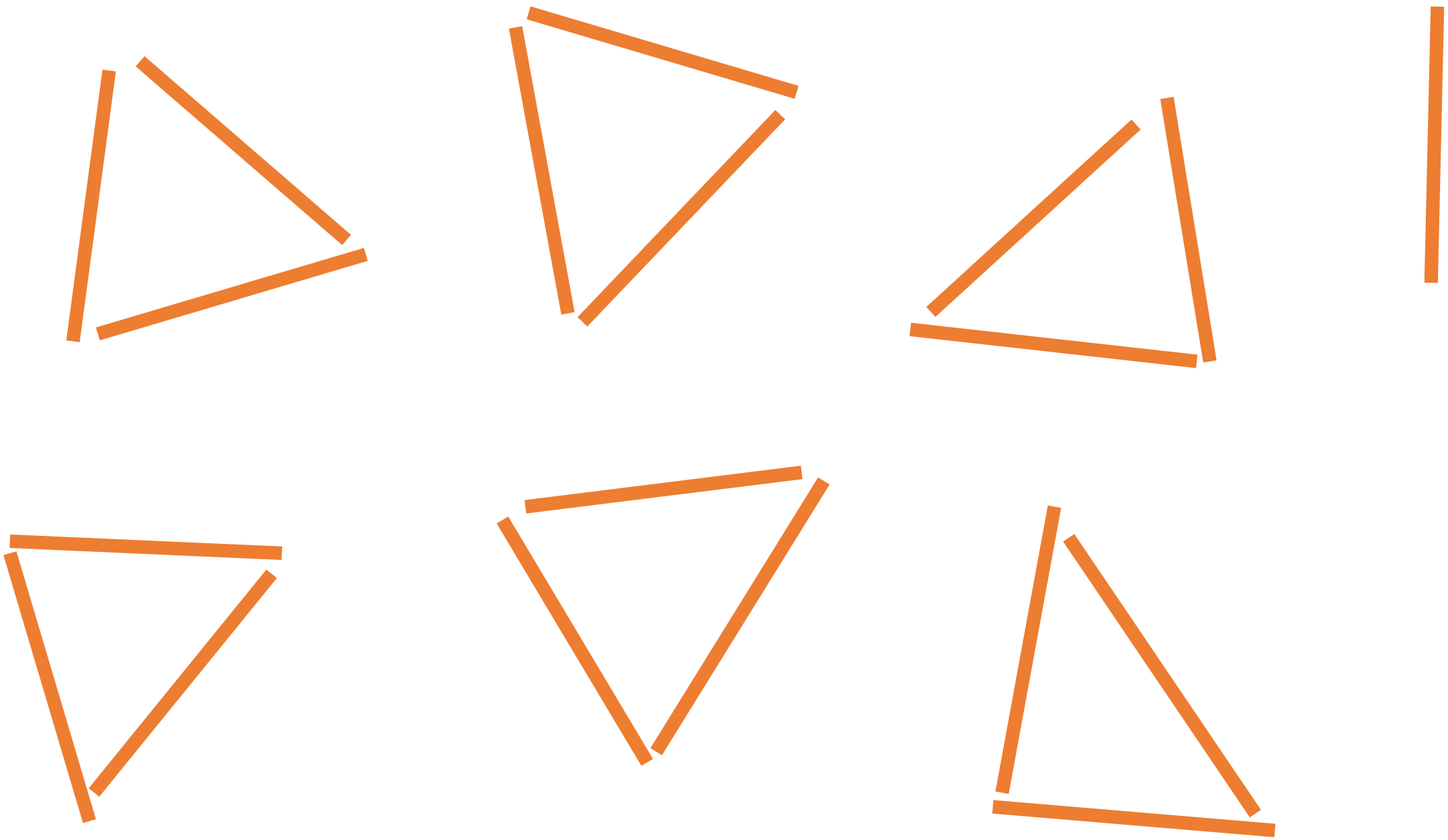
43 × 2 = 86 13 × 4 = 52 13 × 6 = 78

These are the three ways it can be done

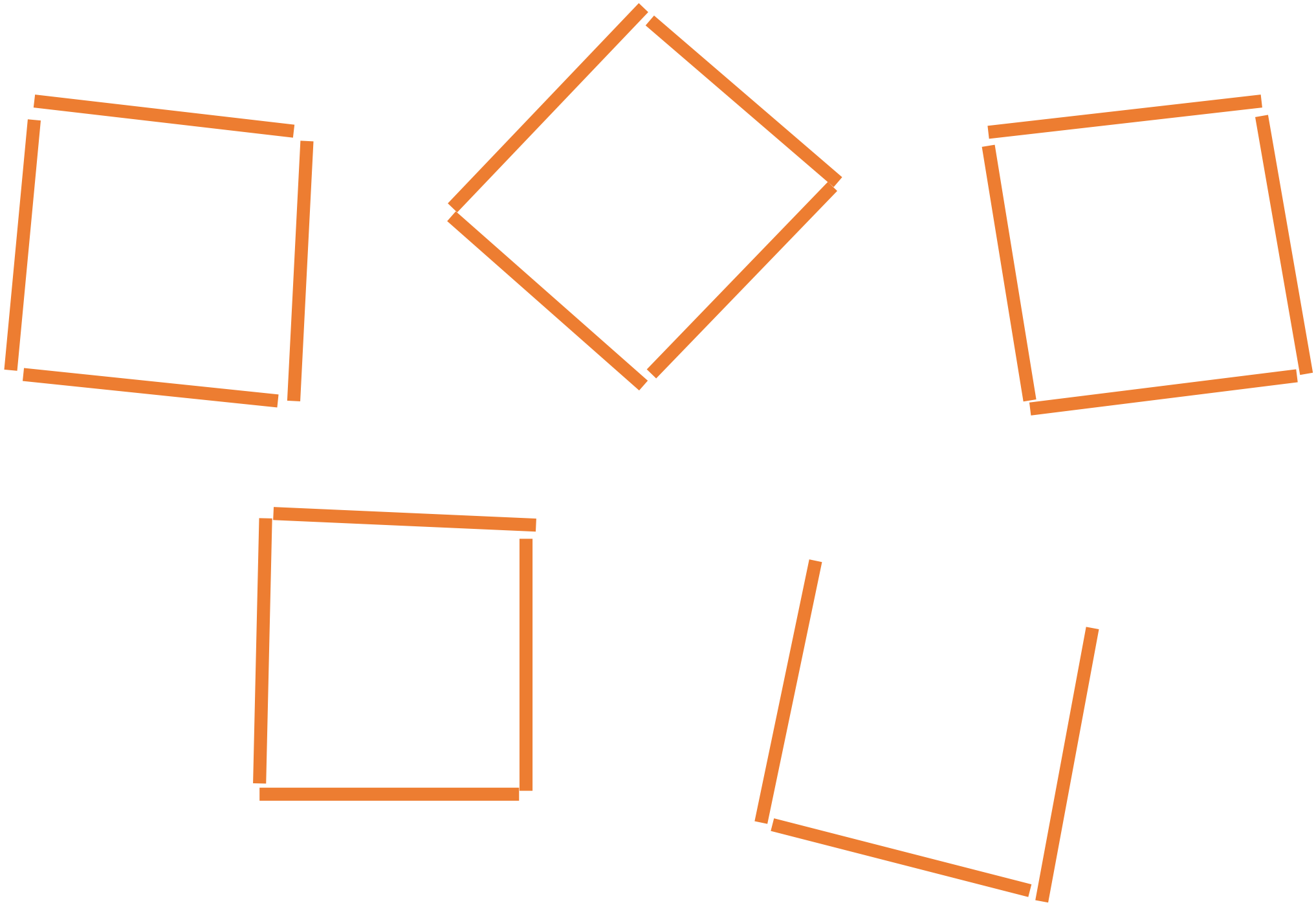
Task 26: Shapes with matchsticks



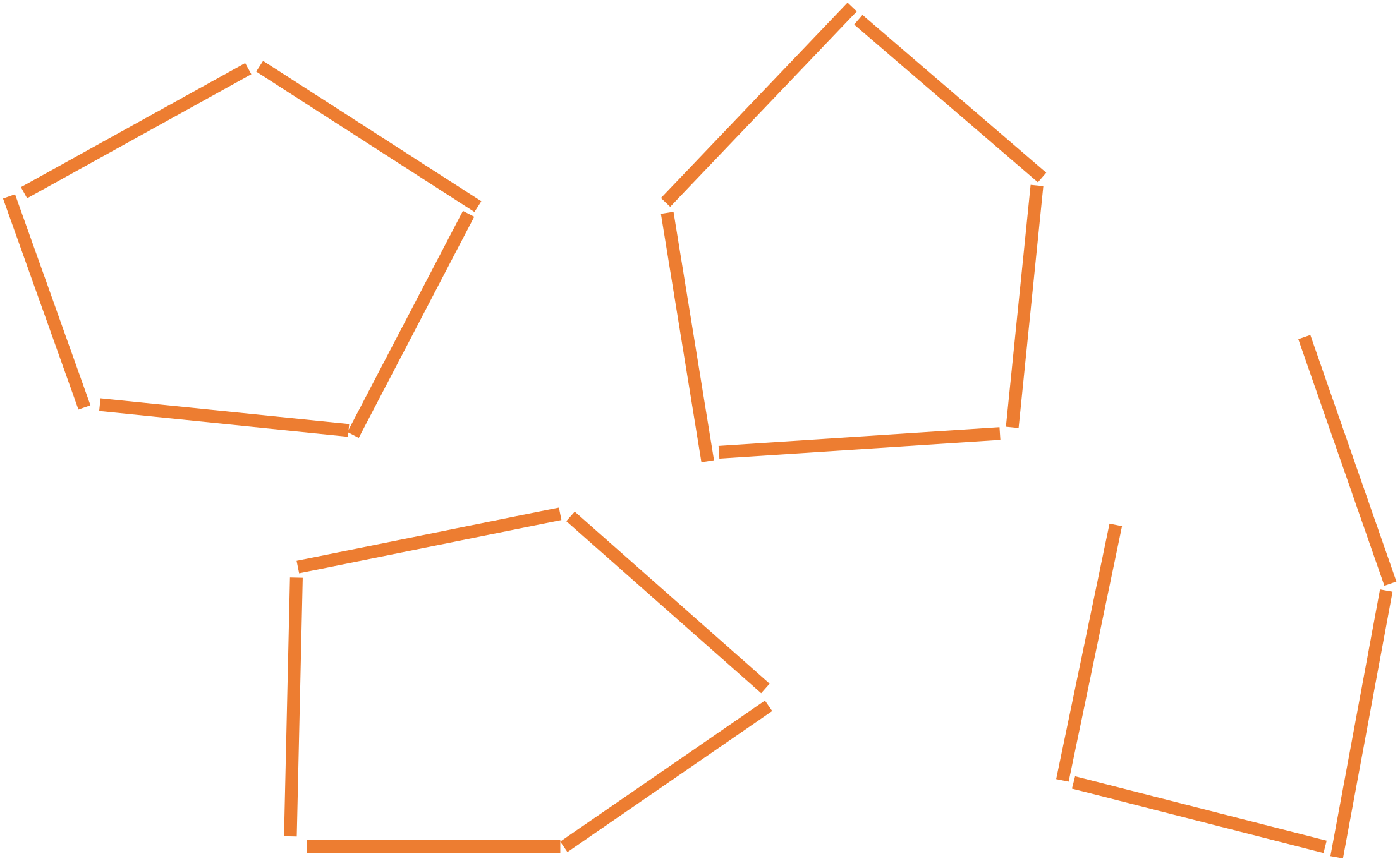
Task 26: Shapes with matchsticks



Task 26: Shapes with matchsticks

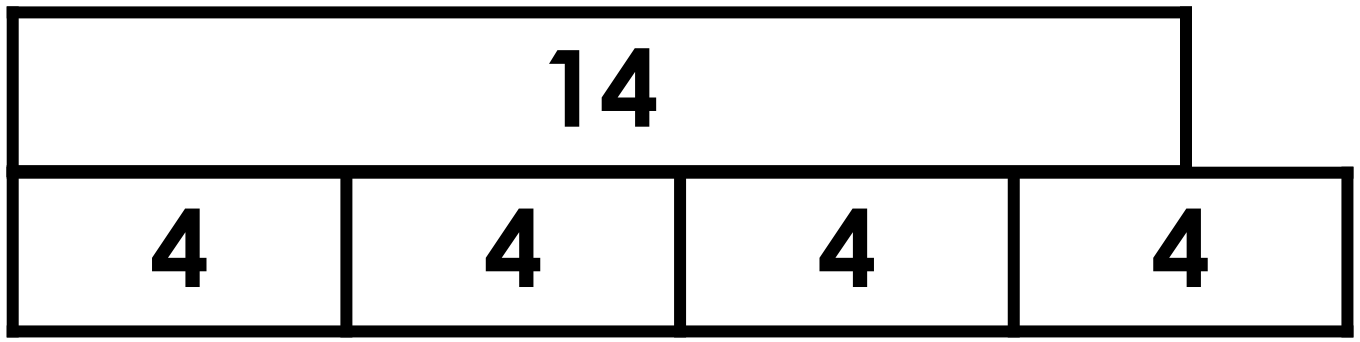


Task 26: Shapes with matchsticks

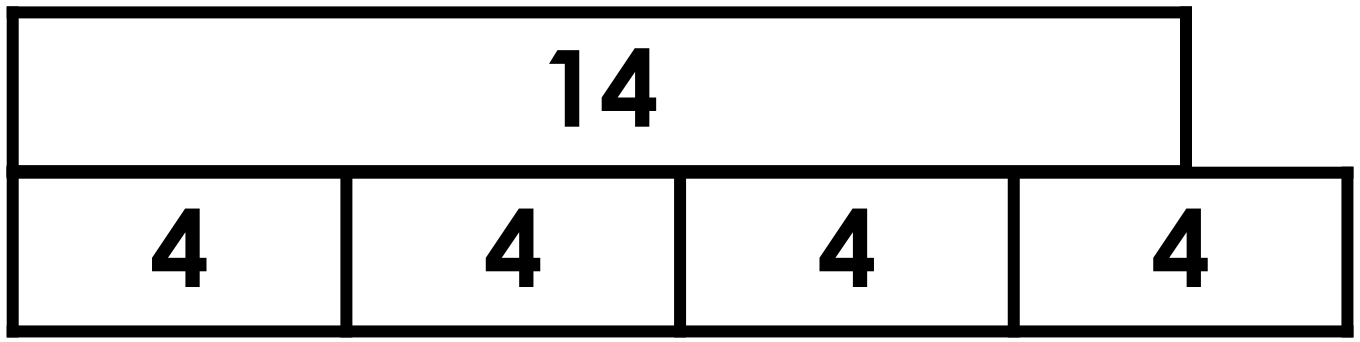


Task 26: Shapes with matchsticks

Task 27: Division in context



Task 27: Division in context



14 people

4 tents

Task 27: Division in context

14			
4	4	4	4

28						
4	4	4	4	4	4	4

Task 27: Division in context

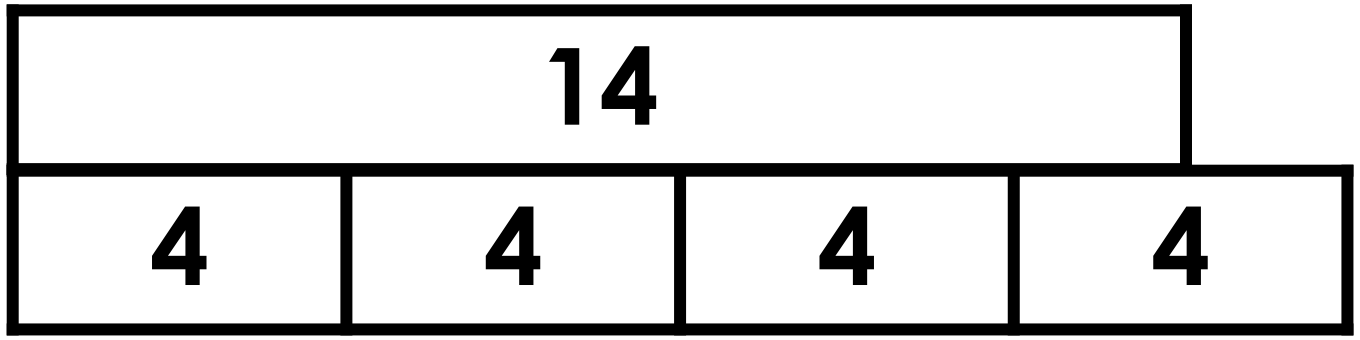
14			
4	4	4	4

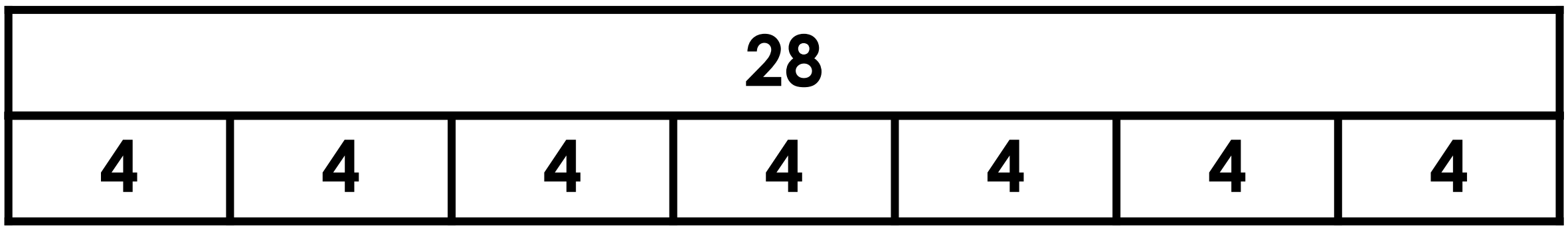
28 people

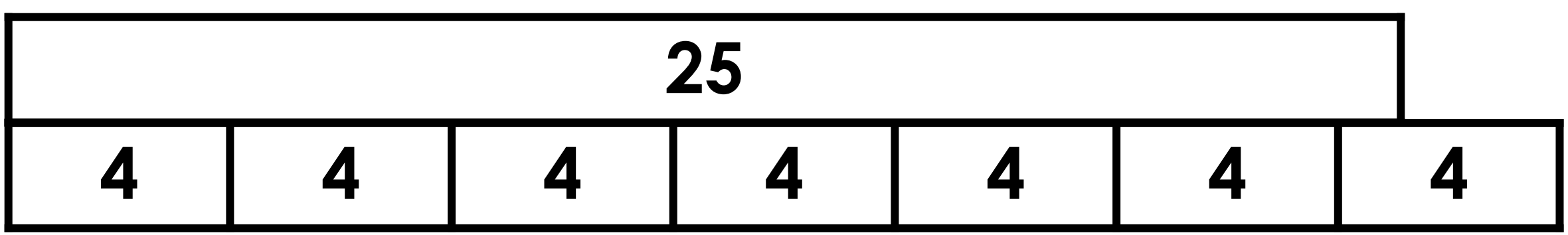
7 tents

28						
4	4	4	4	4	4	4

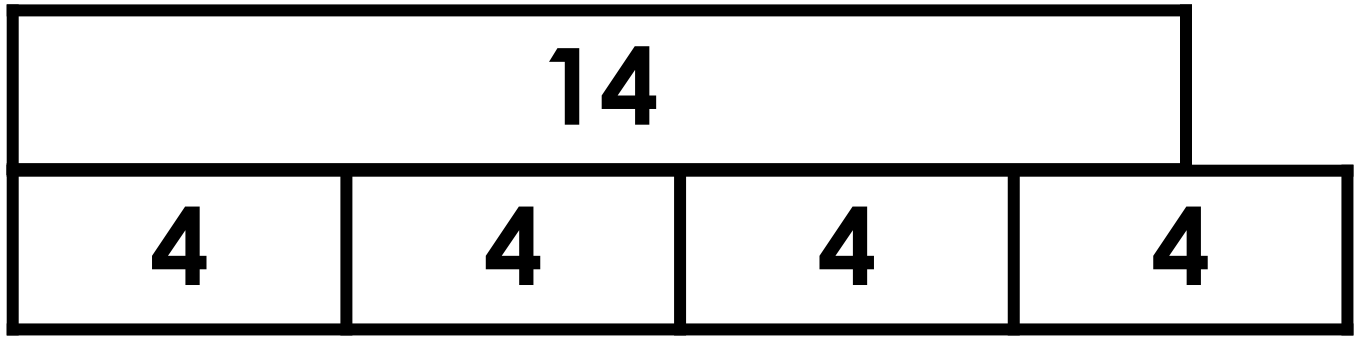
Task 27: Division in context





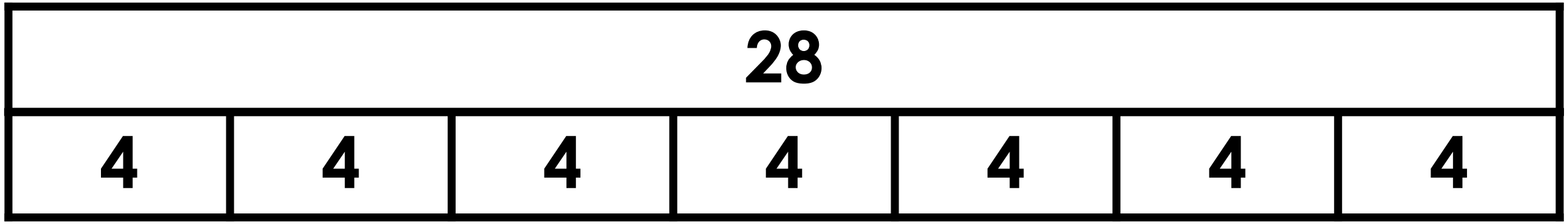


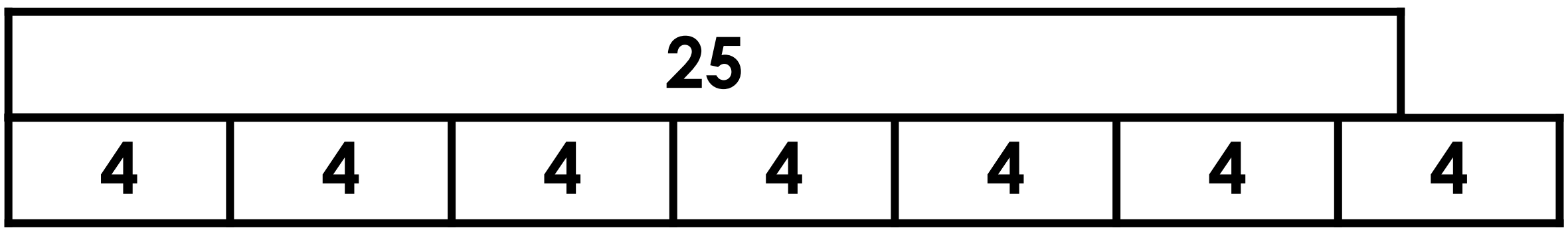
Task 27: Division in context



25 people

7 tents





Task 28: Different quotients

Green Task

□□ ÷ 4 = □

0 1 2 3 9

5 6 7 8

Task 28: Different quotients

Green Task

1 2 ÷ 4 = 3

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

Task 28: Different quotients

Green Task

1 6 ÷ 4 = 4

Not an answer:
Uses 4 twice

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

Task 28: Different quotients

Green Task

2 0 ÷ 4 = 5

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

Task 28: Different quotients

Green Task

2 4 ÷ 4 = 6

Not an answer:
Uses 4 twice

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

Task 28: Different quotients

Green Task

2 8 ÷ 4 = 7

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

28 ÷ 4 = 7

Task 28: Different quotients

Green Task

$$\boxed{3}\,\boxed{2} \div \boxed{4} = \boxed{8}$$

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

28 ÷ 4 = 7

32 ÷ 4 = 8

Task 28: Different quotients

Green Task

$$\boxed{3}\,\boxed{6} \div \boxed{4} = \boxed{9}$$

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

28 ÷ 4 = 7

32 ÷ 4 = 8

36 ÷ 4 = 9

Task 28: Different quotients

Green Task

□□ ÷ 4 = □

Must be less than 40 to give a single-digit answer.

0 1 2 3 9

5 6 7 8

12 ÷ 4 = 3

20 ÷ 4 = 5

28 ÷ 4 = 7

32 ÷ 4 = 8

36 ÷ 4 = 9

Task 28: Different quotients

Yellow Task

□□ ÷ 4 = □□

0 1 2 3 9

5 6 7 8

Task 28: Different quotients

Yellow Task

□□ ÷ 4 = □□

Must be 40 or more to give a 2-digit answer.

The digit 4 has been used: start with 5 tens.

0 1 2 3 9

5 6 7 8

Task 28: Different quotients

Yellow Task

5 2 ÷ 4 = 1 3

0

6 7 8 9

52 ÷ 4 = 13

Task 28: Different quotients

Yellow Task

5 6 ÷ 4 = 1 4

Not an answer:
Uses 4 twice

0 2 3 9 7 8

52 ÷ 4 = 13

Task 28: Different quotients

Yellow Task

6 0 ÷ 4 = 1 5

2 3 9 7 8

52 ÷ 4 = 13 60 ÷ 4 = 15

Task 28: Different quotients

Yellow Task

6 4 ÷ 4 = 1 6

Not an answer:

Uses 4 and 6 twice

0 2 3 9

5 7 8

52 ÷ 4 = 13 60 ÷ 4 = 15

Task 28: Different quotients

Yellow Task

6 8 ÷ 4 = 1 7

0 2 3

5 9

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

Task 28: Different quotients

Yellow Task

7 2 ÷ 4 = 1 8

0

3

9

5

6

52 ÷ 4 = 13

60 ÷ 4 = 15

68 ÷ 4 = 17

72 ÷ 4 = 18

Task 28: Different quotients

Yellow Task

7 6 ÷ 4 = 1 9

0 2 3

5 8

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 28: Different quotients

Yellow Task

8 0 ÷ 4 = 2 0

Not an answer:
Uses 0 twice

1 3 9 5 6 7

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 28: Different quotients

Yellow Task

8 4 ÷ 4 = 2 1

Not an answer:
Uses 4 twice

0 3 9 5 6 7

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 28: Different quotients

Yellow Task

8 8 ÷ 4 = 2 2

Not an answer: Uses 8 and 2 twice

0 1 3 9 5 6 7

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 28: Different quotients

Yellow Task

9 2 ÷ 4 = 2 3

Not an answer: Uses 2 twice

0 1

5 6 7 8

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 28: Different quotients

Yellow Task

9 6 ÷ 4 = 2 4

Not an answer:
Uses 4 twice

0 1 2 3 9

5 6 7 8

52 ÷ 4 = 13 60 ÷ 4 = 15 68 ÷ 4 = 17

72 ÷ 4 = 18 76 ÷ 4 = 19

Task 29: Finding factors

84

1 2 3 4 5 6 7 8 9

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 8 9

1 and 2 are factors of every even number.

All factors of 5 have a ones value of 5 or 0.

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 8 9

20 × 3 = 60 **8 × 3 = 24**

60 + 24 = 84

3 is a factor of 84

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 8 9

20 × 4 = 80 **1 × 4 = 4**

80 + 4 = 84

4 is a factor of 84

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 8 9

10 × 6 = 60 **4 × 6 = 24**

60 + 24 = 84

6 is a factor of 84

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 8 9

10 × 7 = 70 **2 × 7 = 14**

70 + 14 = 84

7 is a factor of 84

Task 29: Finding factors

84

1 2 3 4 ~~5~~ 6 7 ~~8~~ 9

10 × 8 = 80 **1 × 8 = 8**

8 more than 80 is not 84

8 is not a factor of 84

Task 29: Finding factors

84

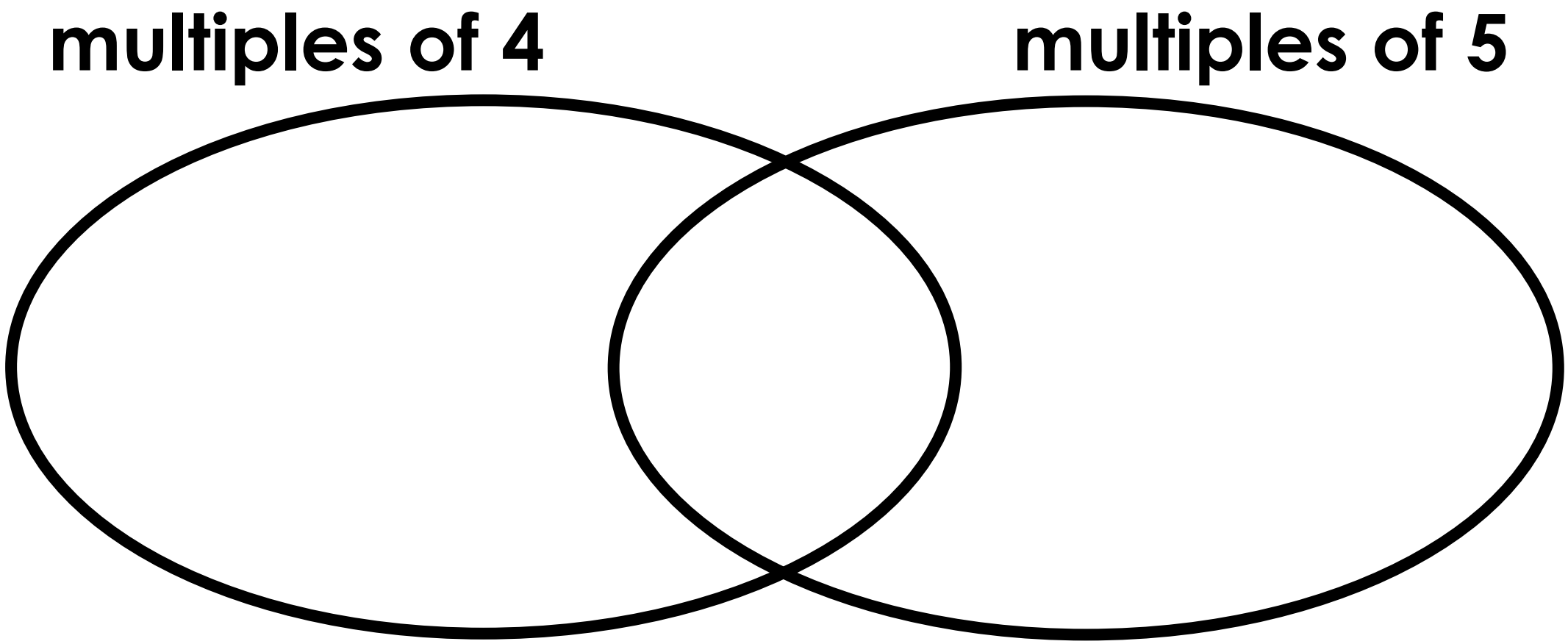
1 2 3 4 ~~5~~ 6 7 ~~8~~ ~~9~~

10 × 9 = 90 **1 × 9 = 9**

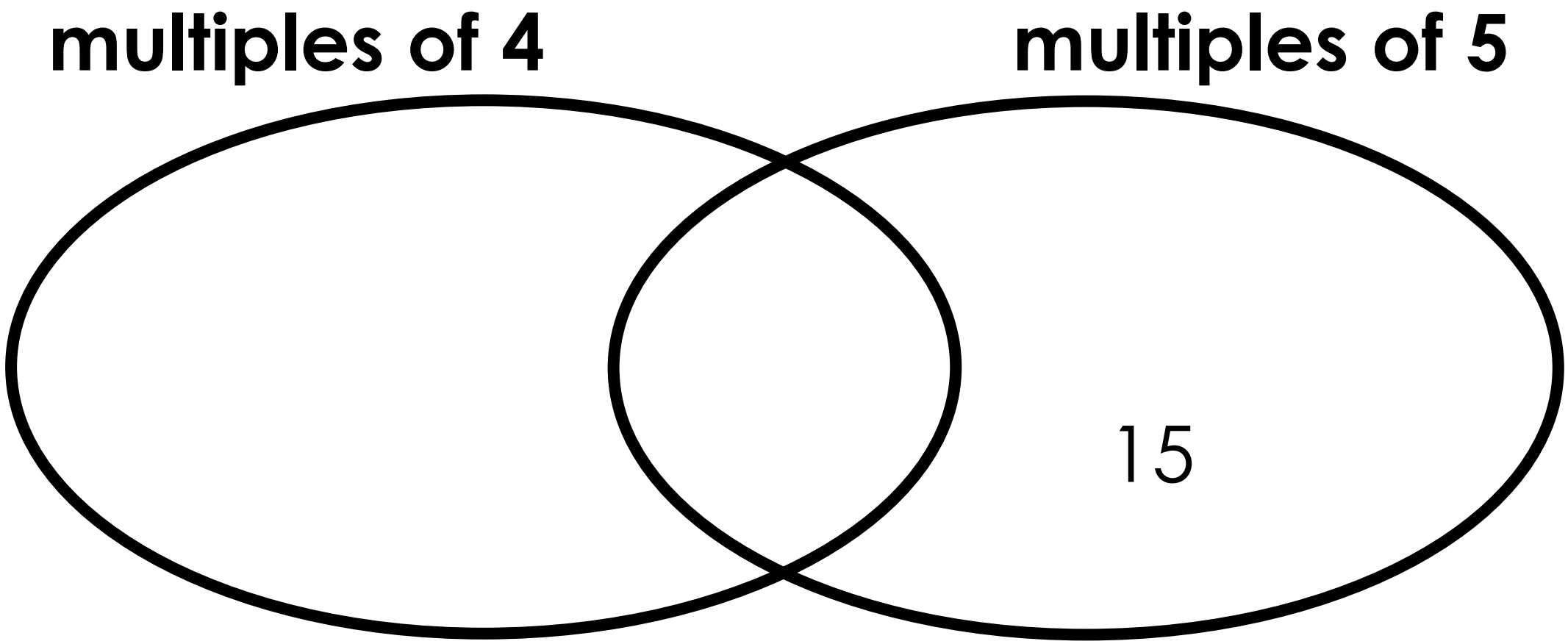
9 less than 90 is not 84

9 is not a factor of 84

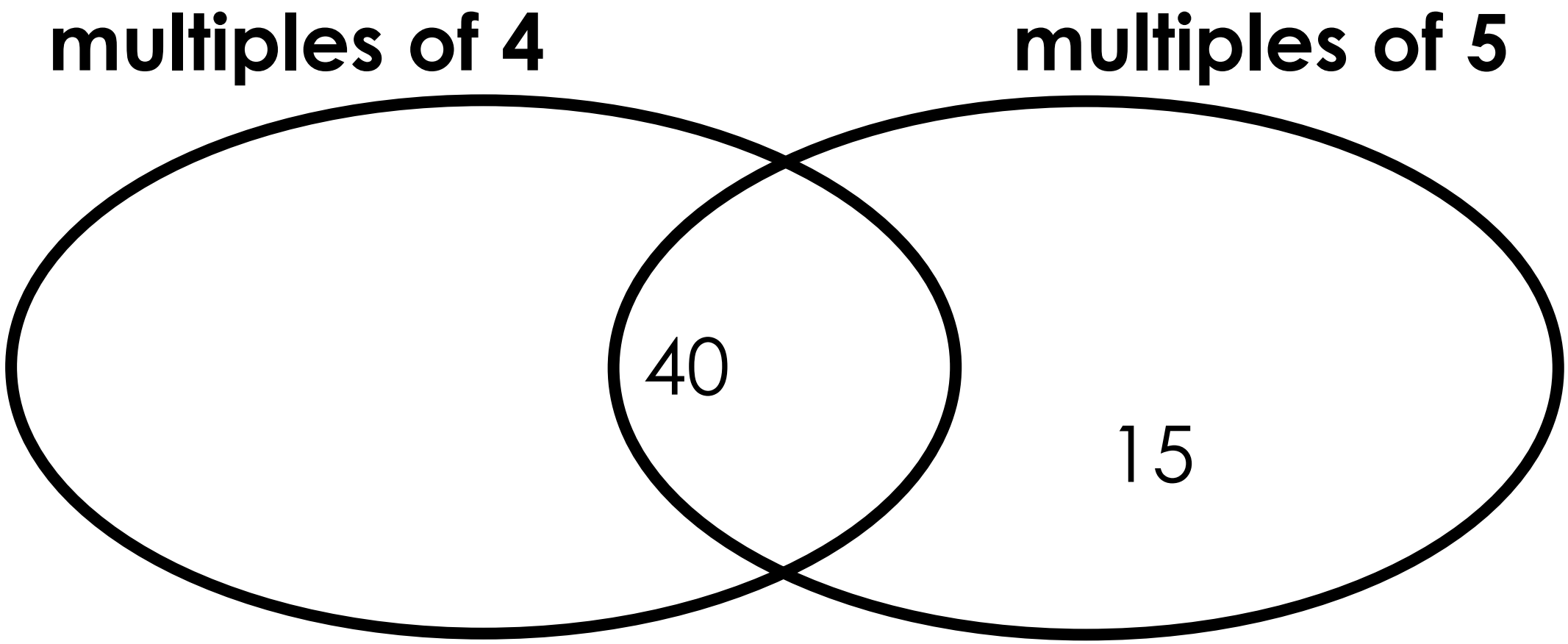
Task 30: Venn diagrams



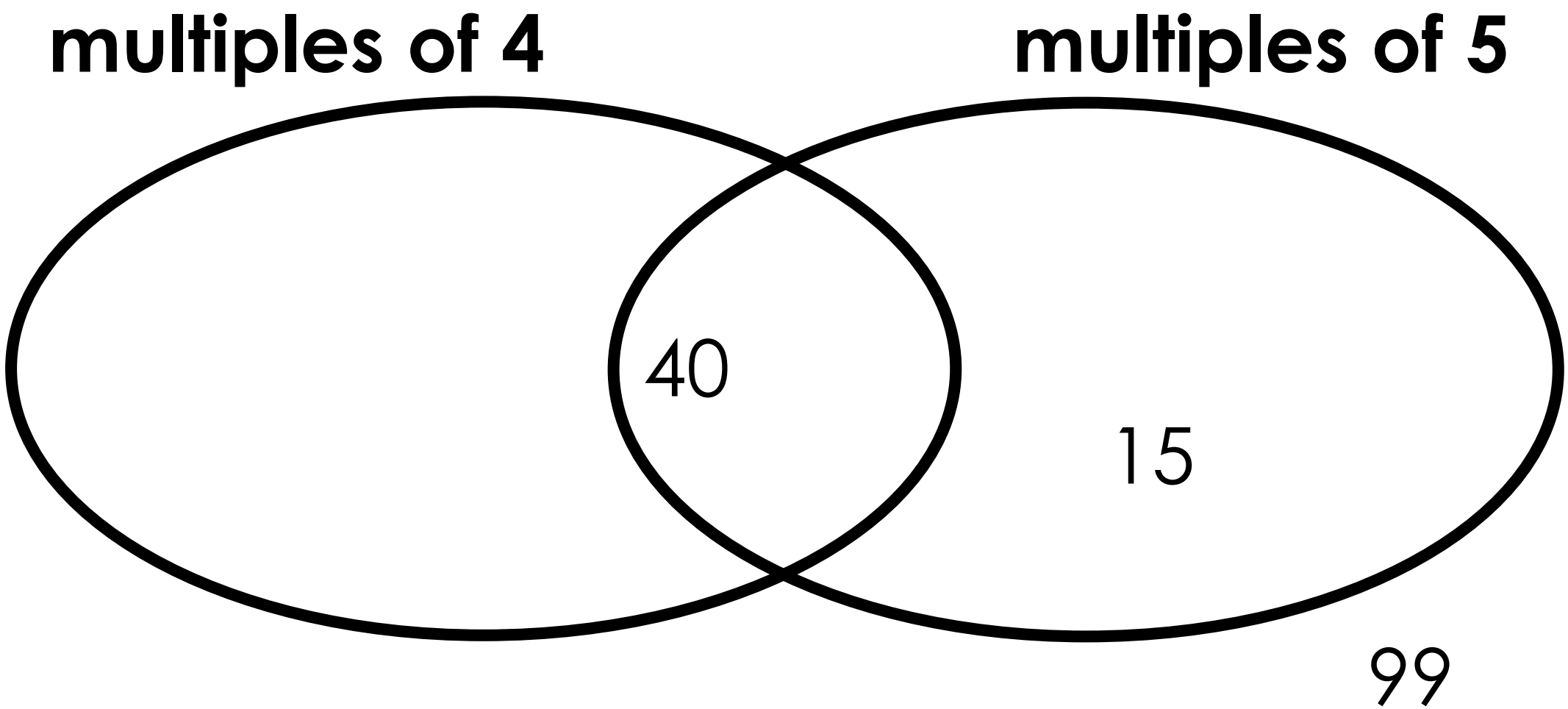
Task 30: Venn diagrams



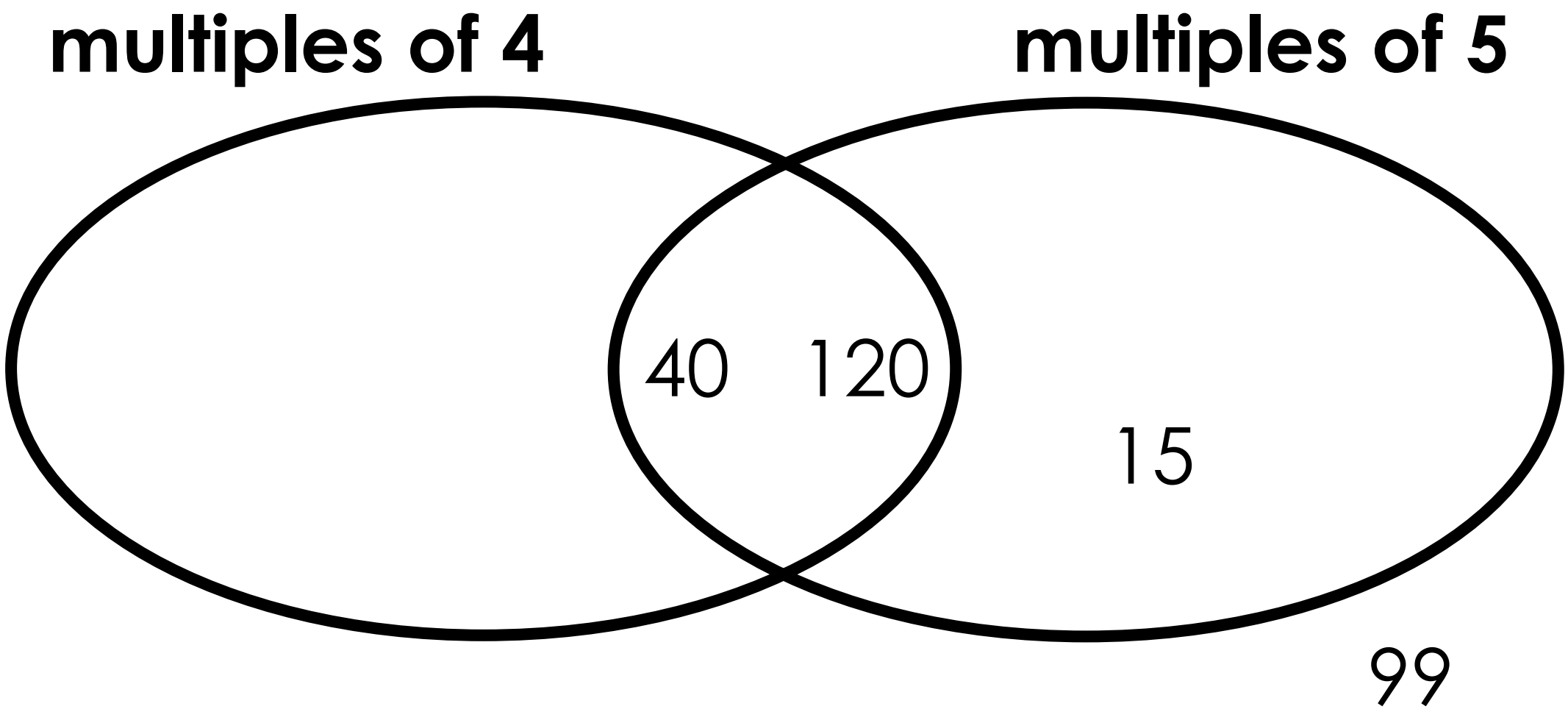
Task 30: Venn diagrams



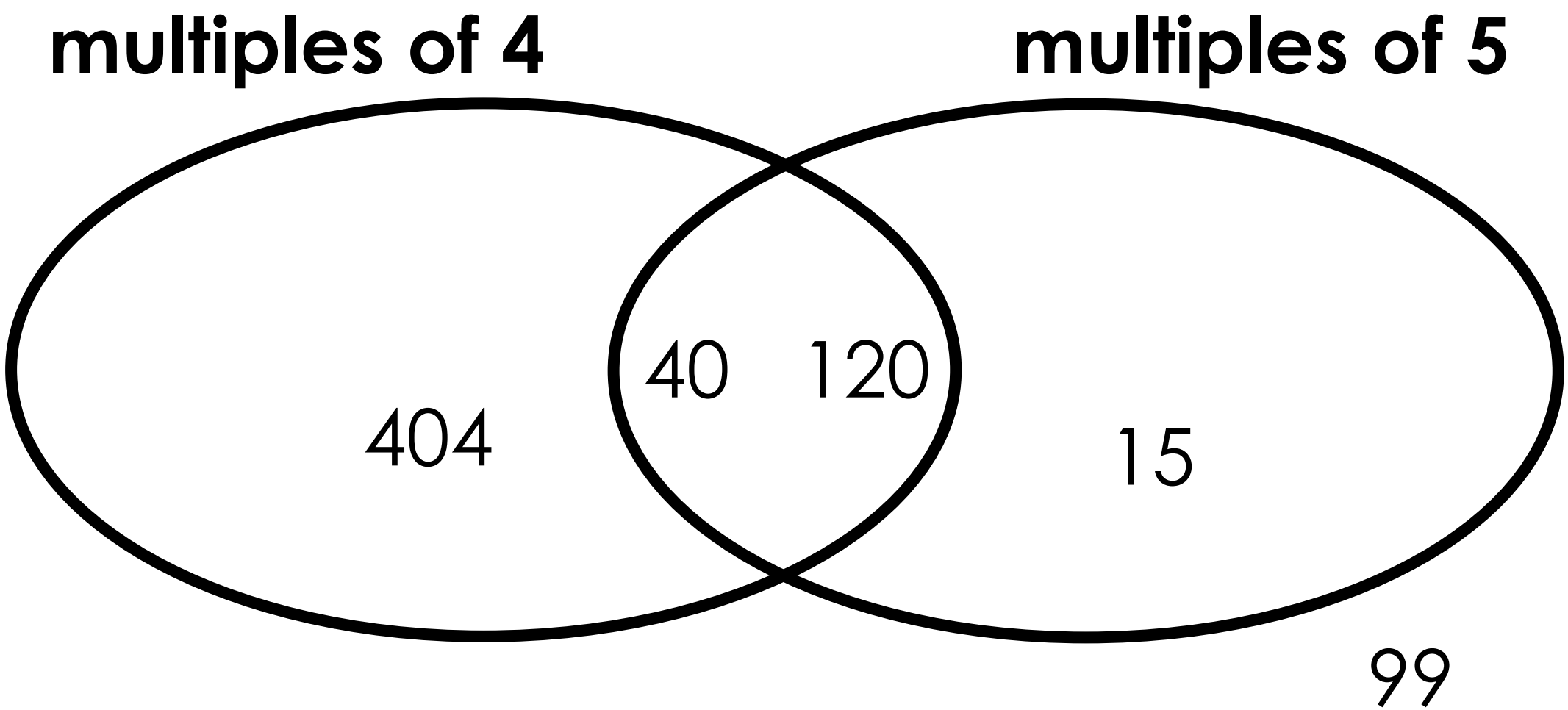
Task 30: Venn diagrams



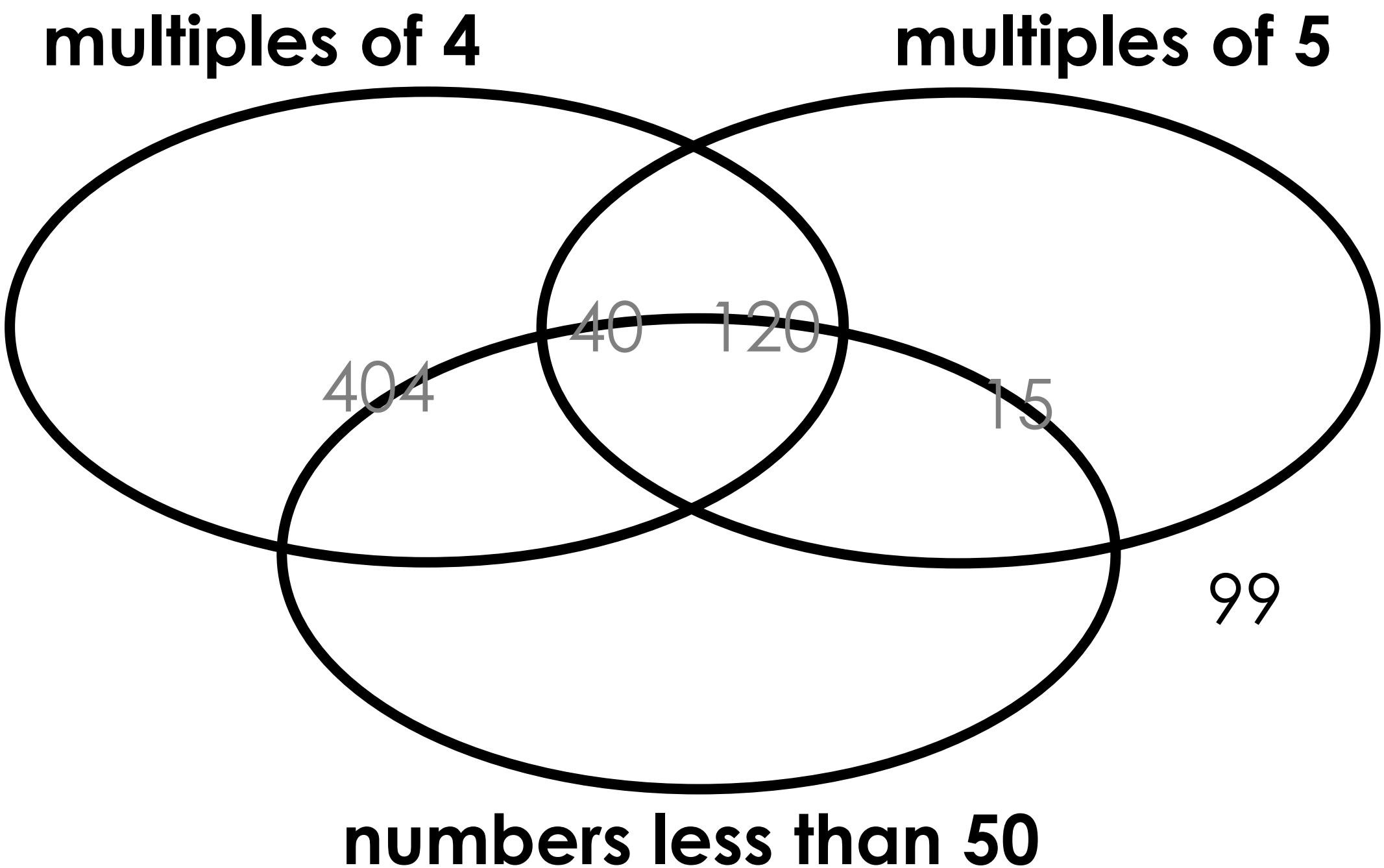
Task 30: Venn diagrams



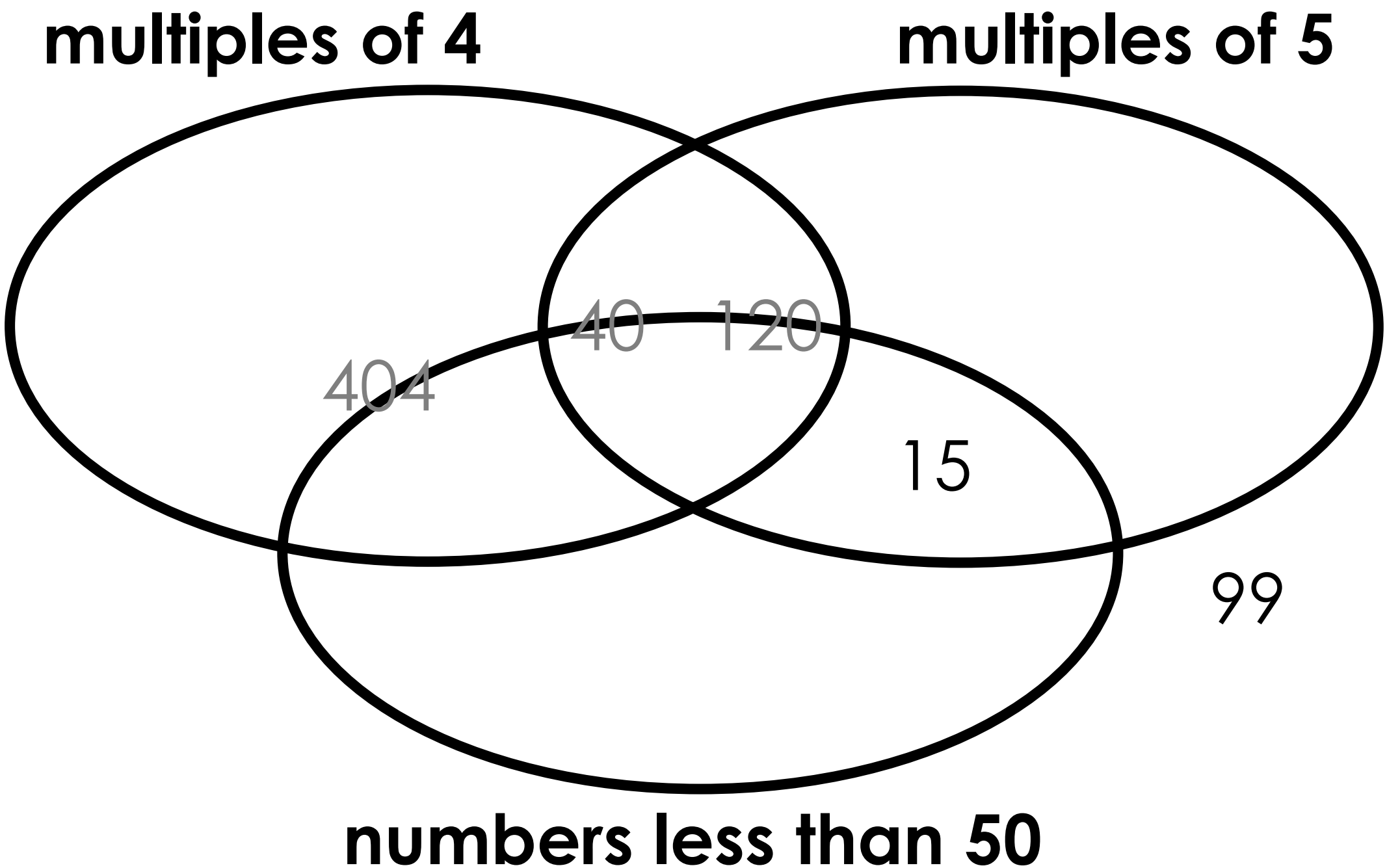
Task 30: Venn diagrams



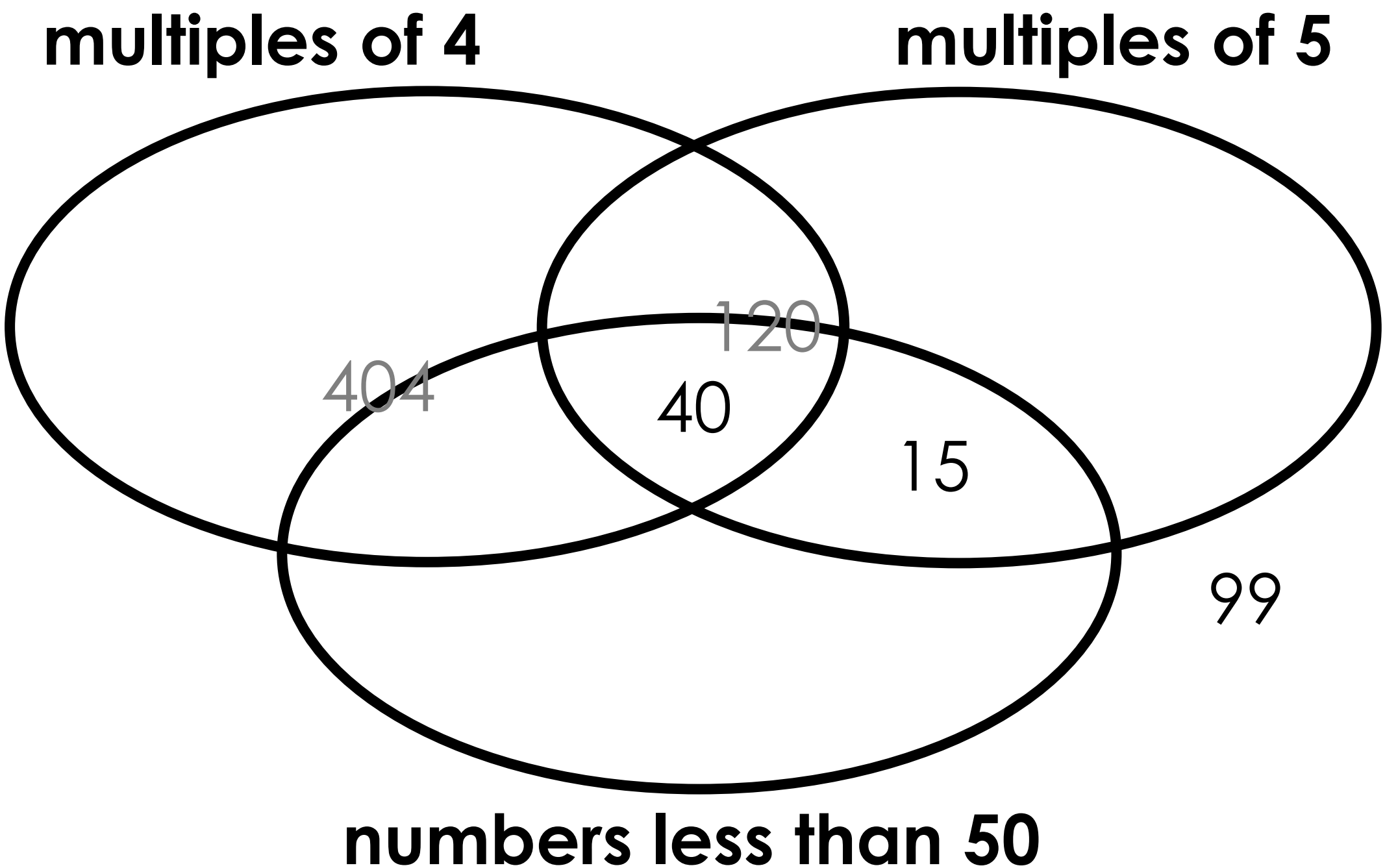
Task 30: Venn diagrams



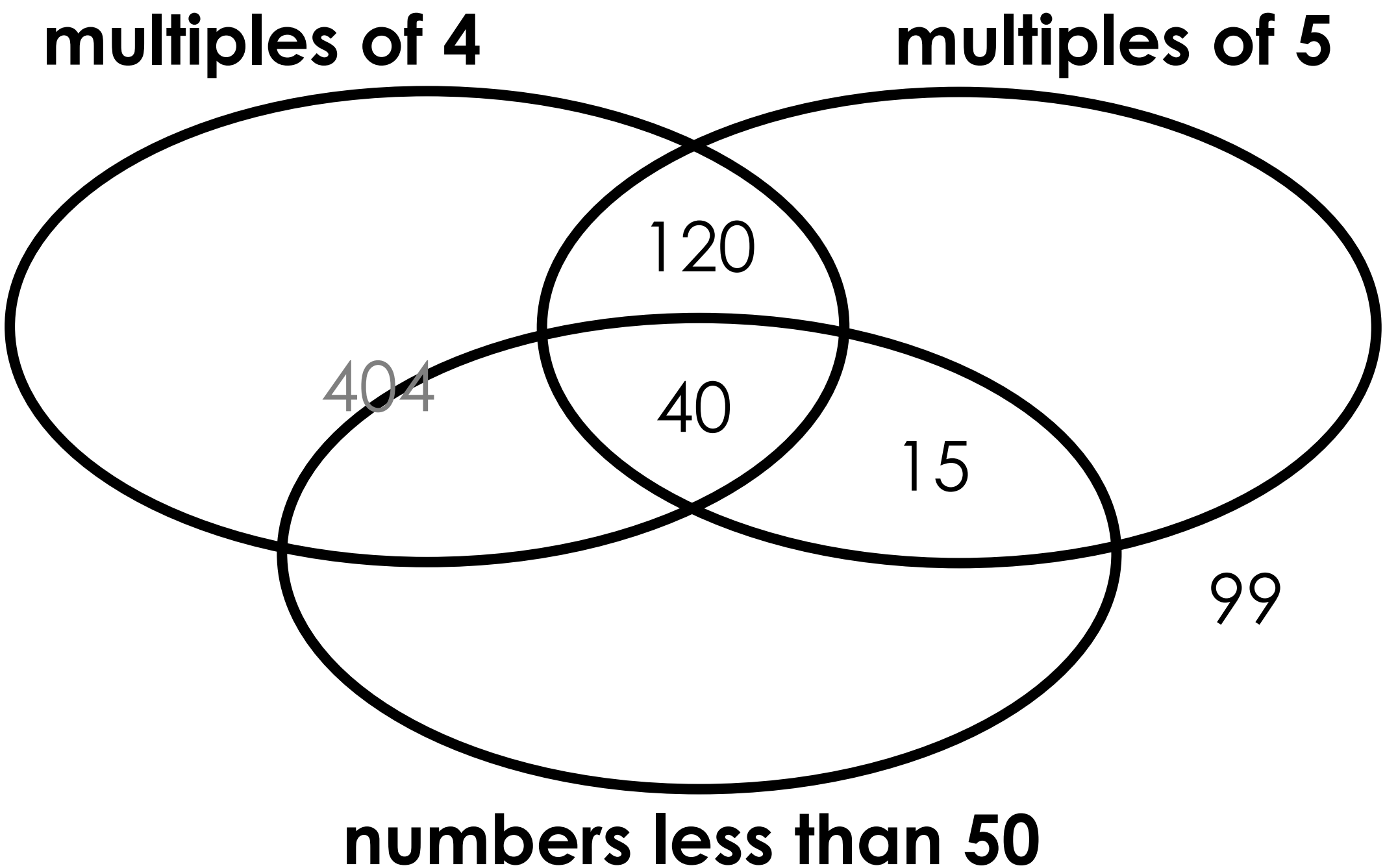
Task 30: Venn diagrams



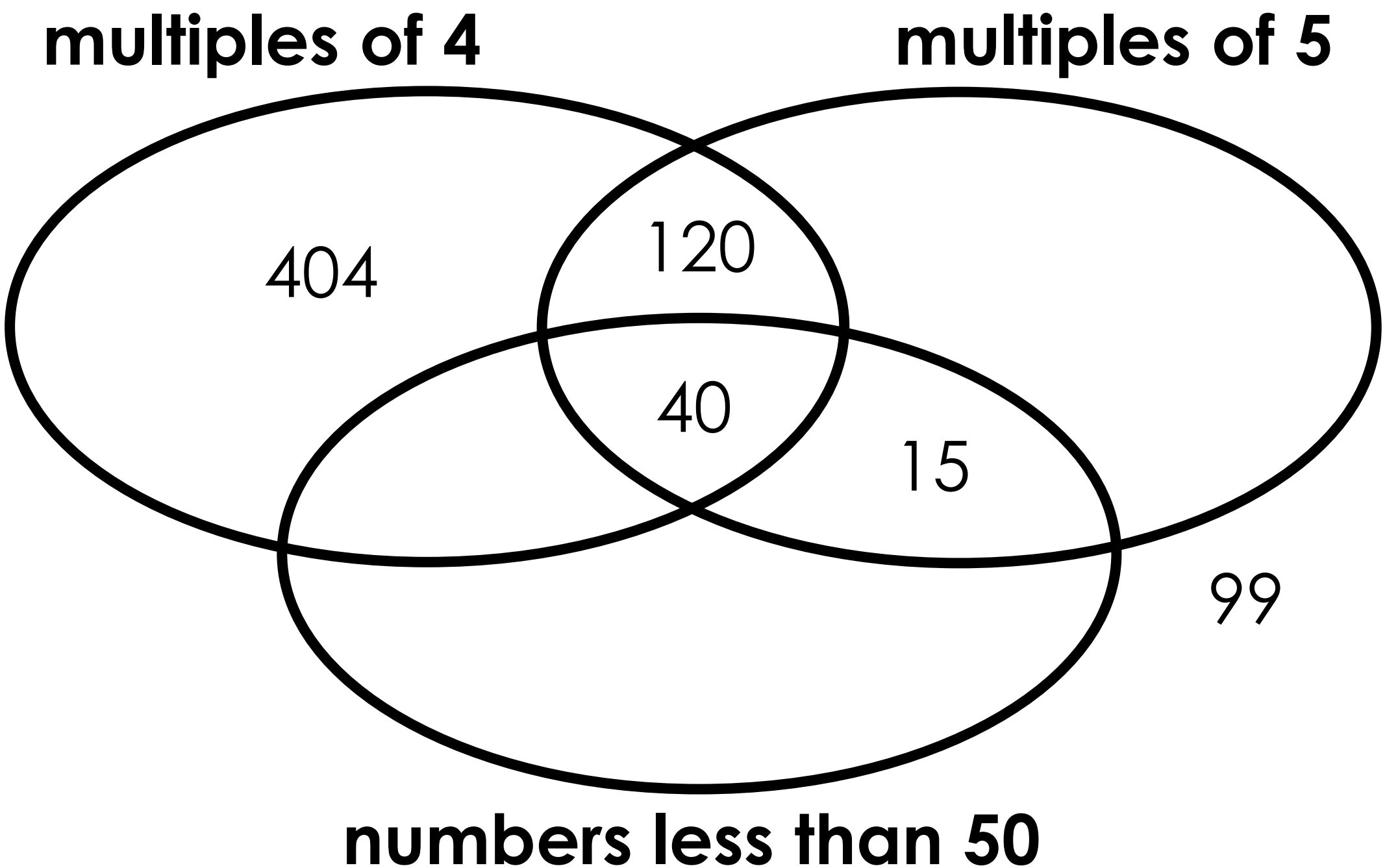
Task 30: Venn diagrams



Task 30: Venn diagrams



Task 30: Venn diagrams



Task 31: Different answers

$\square \div 2 = 20$

$\square - 11 > 8$

$20 - \square = 5 \times \square$

$11 - \square > 8$

$24 - \square = 18$

$\square \times 5 = 26 + \square$

Task 31: Different answers

$\boxed{40} \div 2 = 20$

$24 - \boxed{6} = 18$

One answer: one blank box, has a = sign

Task 31: Different answers

$\boxed{40} \div 2 = 20$

$24 - \boxed{6} = 18$

$20 - \boxed{15} = 5 \times \boxed{1}$

$20 - \boxed{10} = 5 \times \boxed{2}$

$20 - \boxed{5} = 5 \times \boxed{3}$

$11 - \boxed{1} > 8$

$11 - \boxed{2} > 8$

Two or three answers: one side limits the number of possible answers.

Task 31: Different answers

$\boxed{40} \div 2 = 20$

$24 - \boxed{6} = 18$

$20 - \boxed{15} = 5 \times \boxed{1}$

$20 - \boxed{10} = 5 \times \boxed{2}$

$20 - \boxed{5} = 5 \times \boxed{3}$

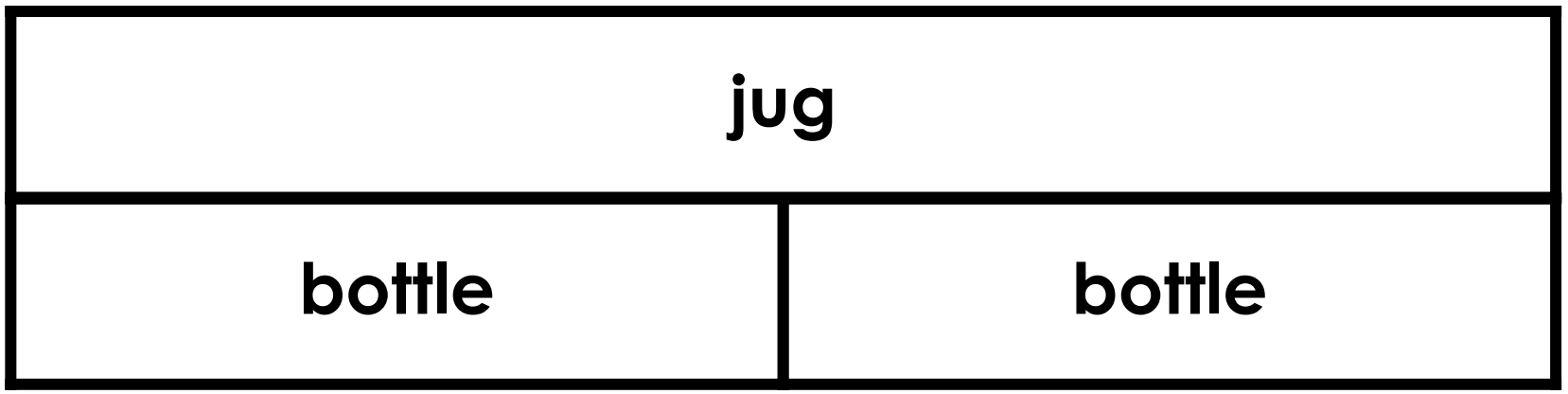
$11 - \boxed{1} > 8$

$11 - \boxed{2} > 8$

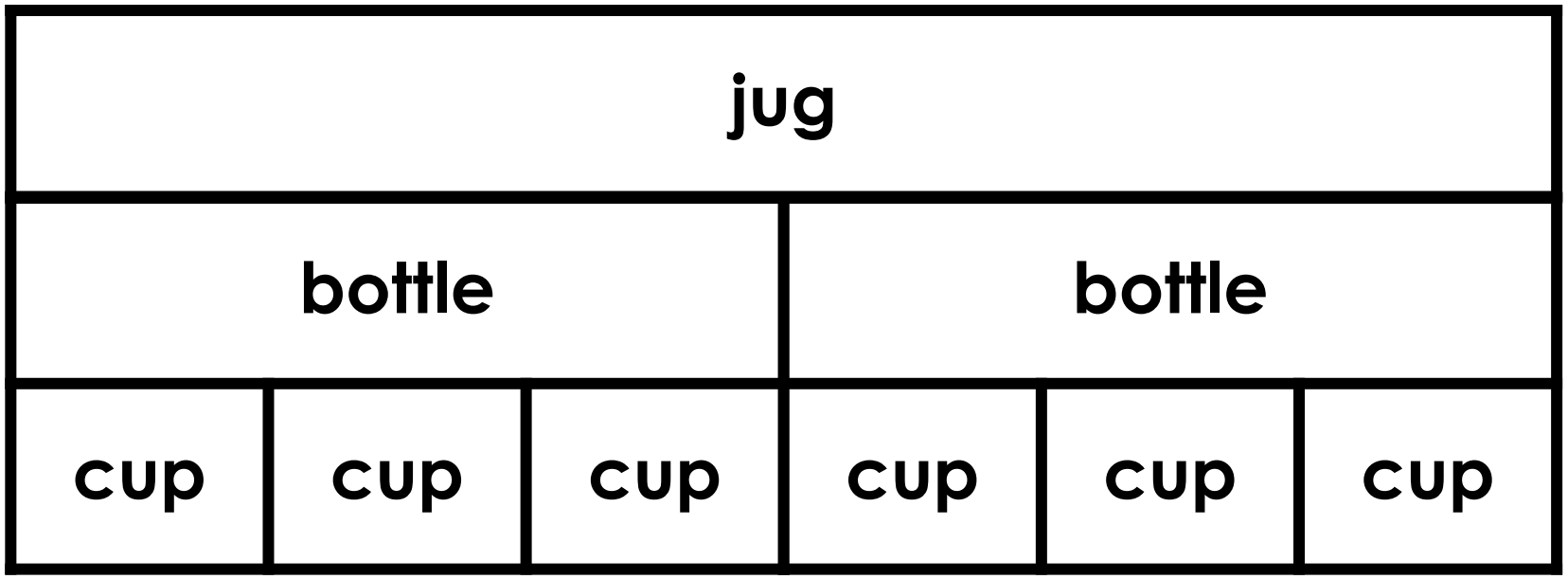
$\boxed{10} \times 5 = 26 + \boxed{24}$ ← example answers → $\boxed{81} - 11 > 8$

Infinite answers: values can keep increasing.

Task 32: Questions in context



Task 32: Questions in context



6 cups

Task 32: Questions in context

white bread	brown bread

Task 32: Questions in context

white bread				brown bread			
chicken	ham	tuna	cheese	chicken	ham	tuna	cheese

8 sandwiches

Task 32: Questions in context

£12		
John	Friend 1	Friend 2

Task 32: Questions in context

£12		
John £4	Friend 1 £4	Friend 2 £4

John's ticket costs £4

Task 32: Questions in context

They blow the balloons up at the same speed.

Dad

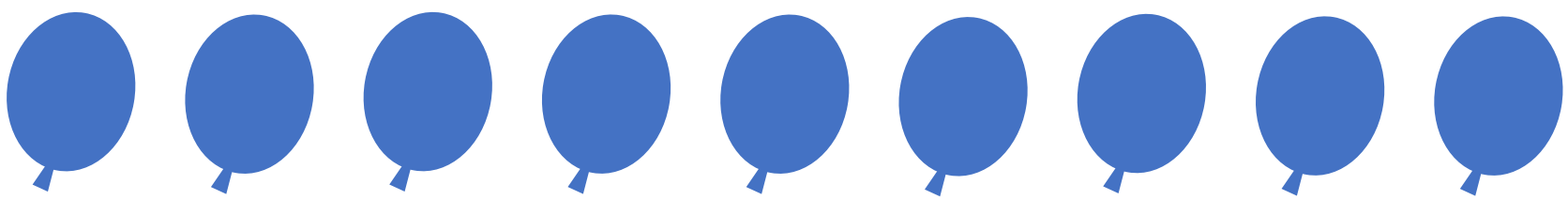
Mum

Task 32: Questions in context

They blow the balloons up at the same speed.

Dad

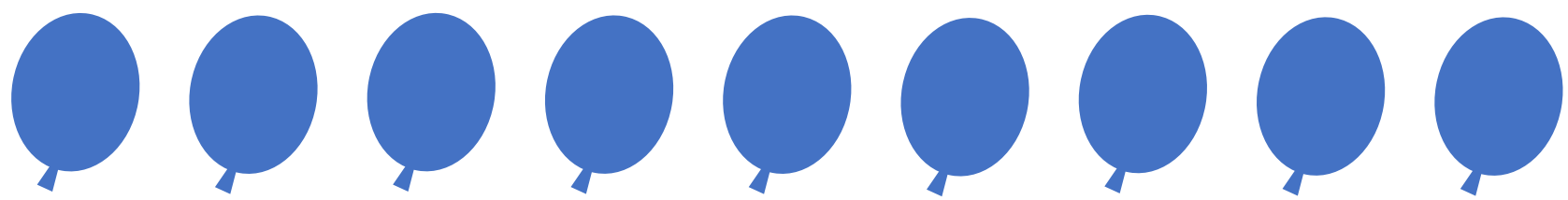
Mum



Task 32: Questions in context

Dad

Mum



Dad blows up 11 balloons

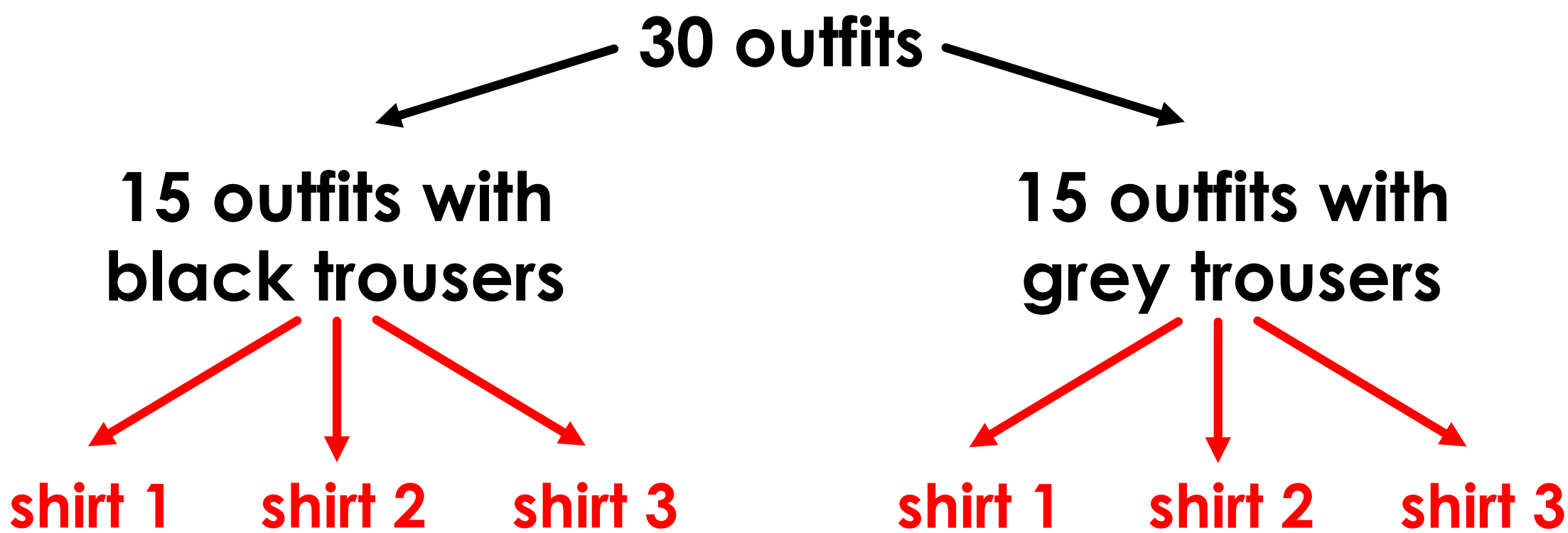
Task 33: Combinations

30 outfits

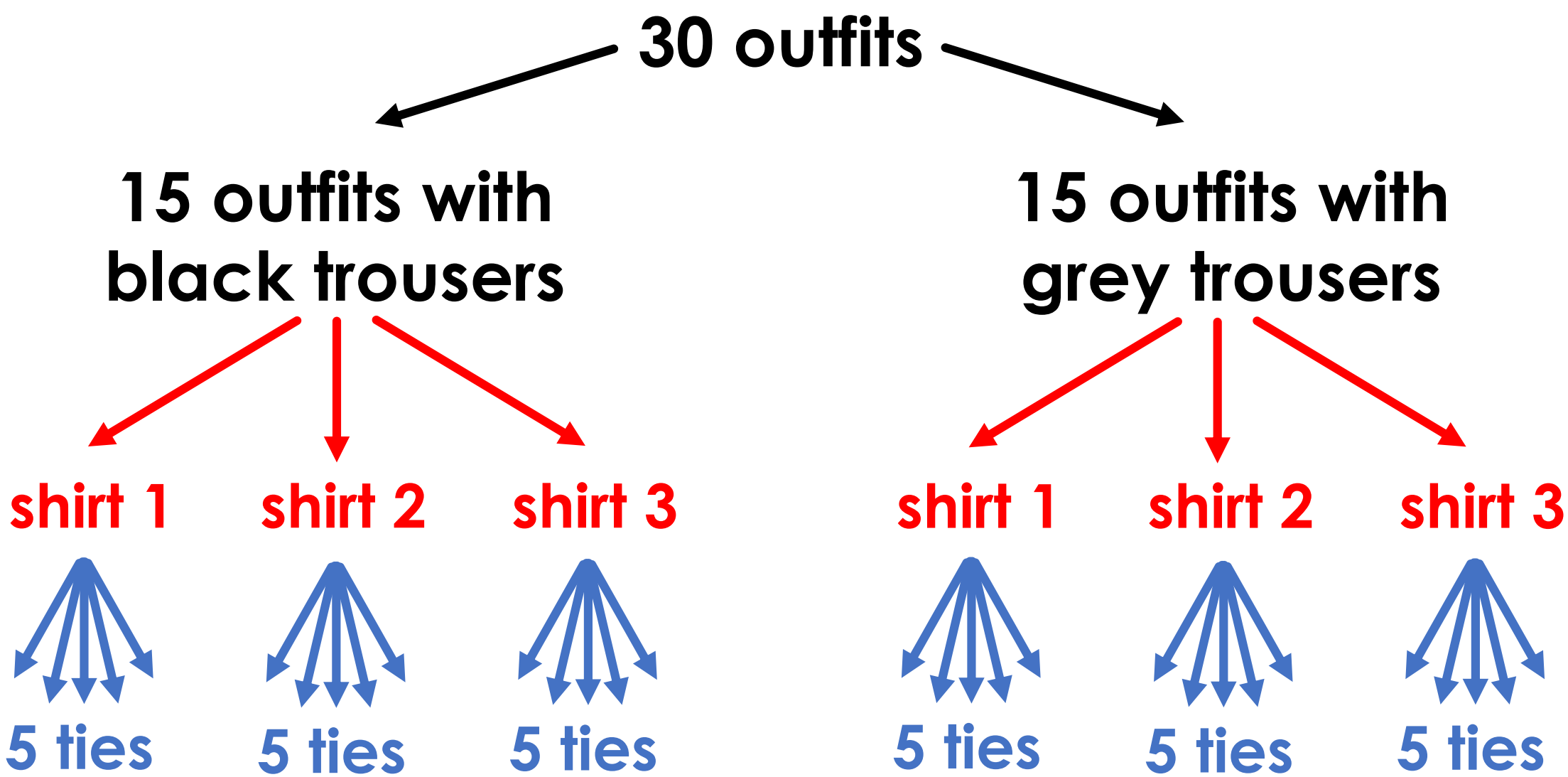
15 outfits with black trousers

15 outfits with grey trousers

Task 33: Combinations



Task 33: Combinations



Task 33: Combinations

30 outfits

15 outfits with black trousers

- **shirt 1** → 5 ties
- **shirt 2** → 5 ties
- **shirt 3** → 5 ties

15 outfits with grey trousers

- **shirt 1** → 5 ties
- **shirt 2** → 5 ties
- **shirt 3** → 5 ties

2 pairs of trousers, 3 shirts and 5 ties = 30 outfits

Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

The fin is a small fraction of a shark.

Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

The fin is a small fraction of a shark.

A trunk is a quite a large part of an elephant (but a lot less than a half).

Task 34: Estimating fractions

A fingernail is a tiny fraction of a human.

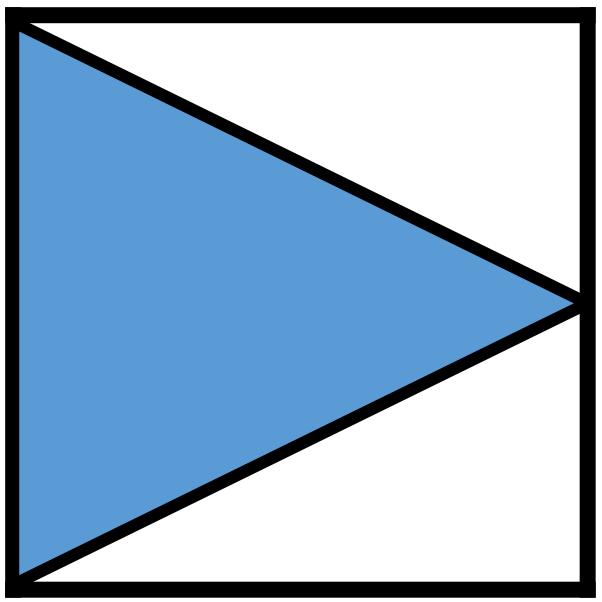
The fin is a small fraction of a shark.

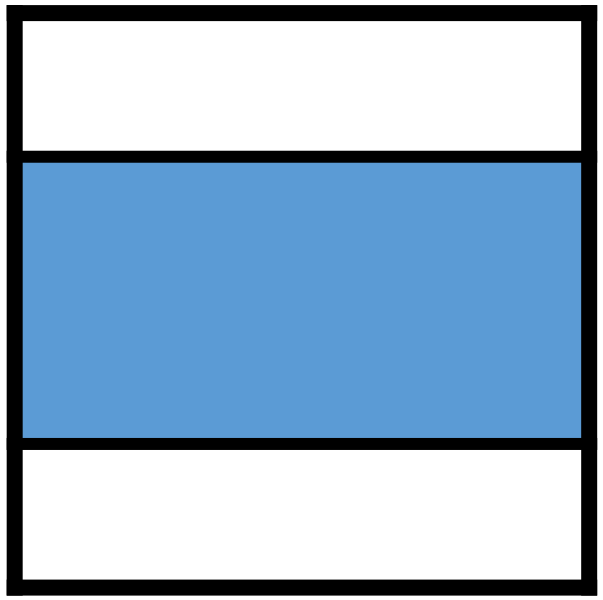
A trunk is a quite a large part of an elephant (but a lot less than a half).

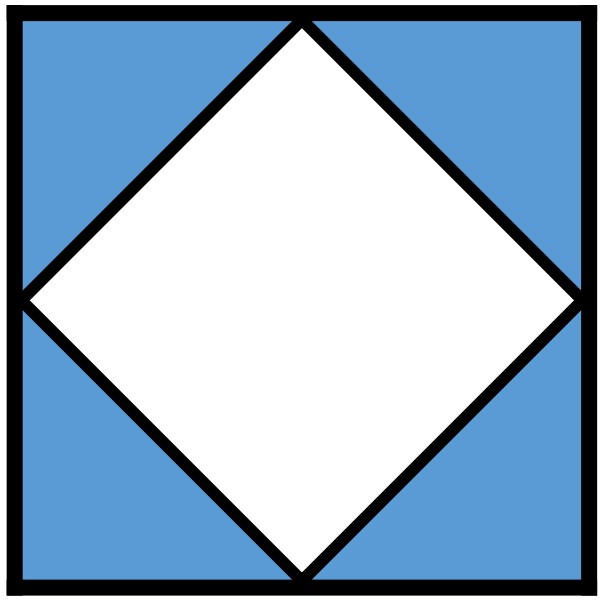
The wings are more than half of a butterfly.

Task 35: Fraction of a shape

$$\frac{1}{2}$$

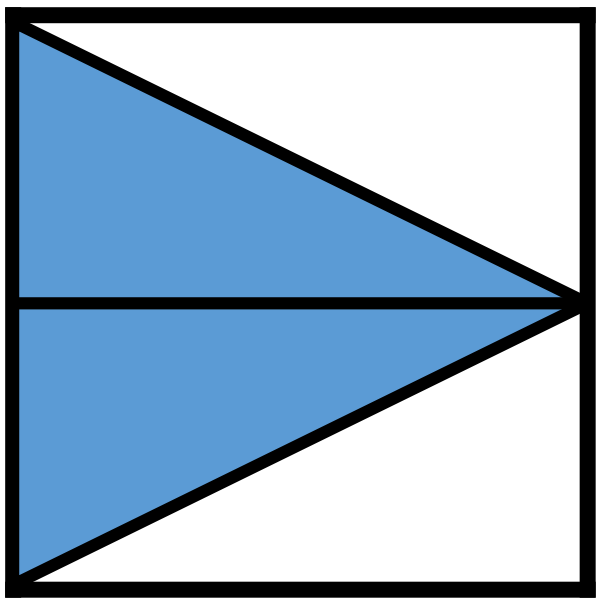


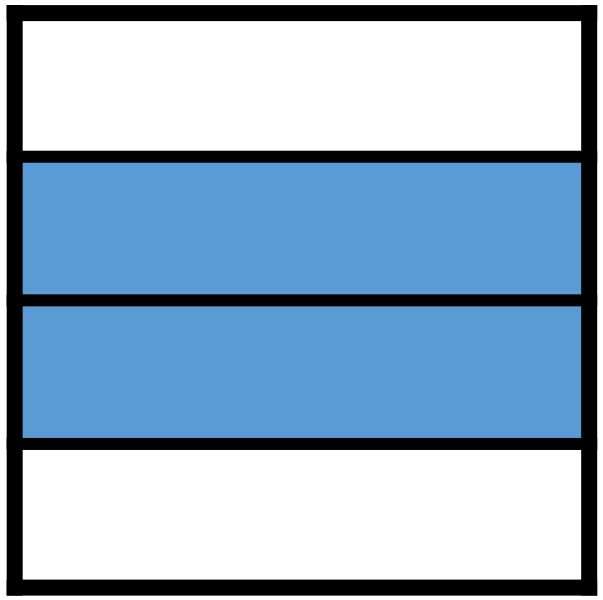


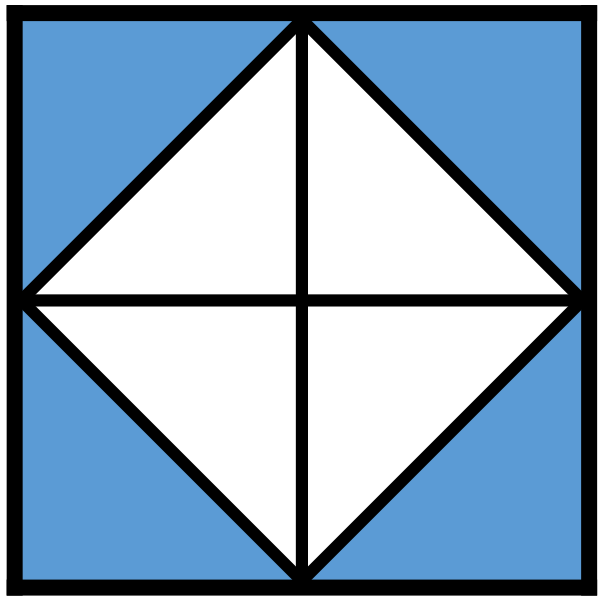


Task 35: Fraction of a shape

$$\frac{1}{2}$$

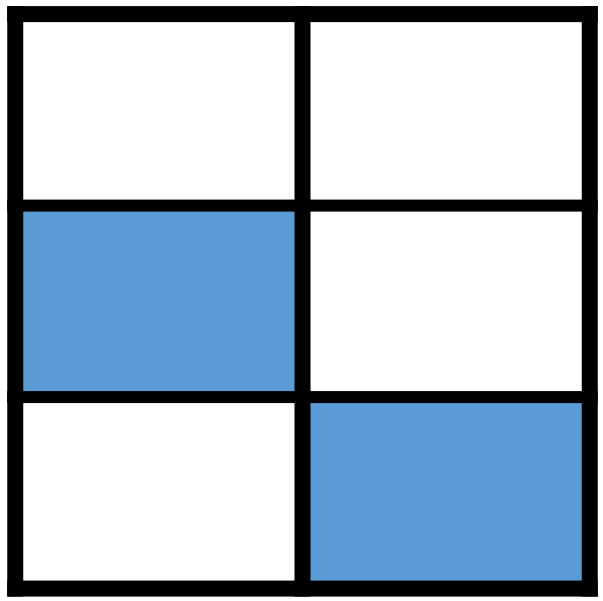


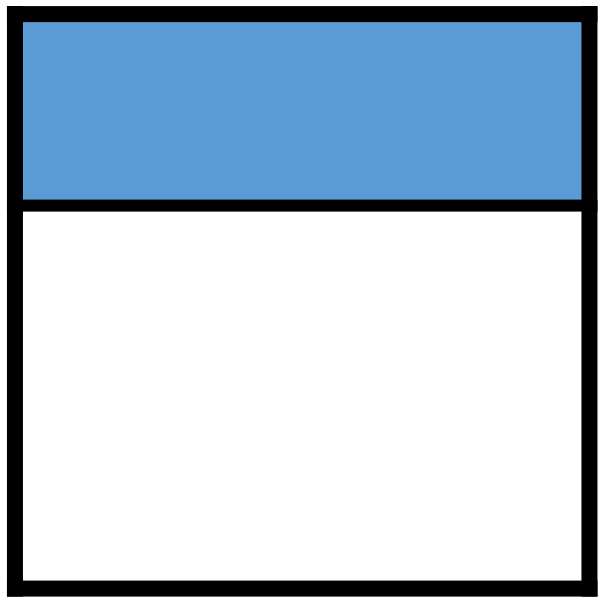




Task 35: Fraction of a shape

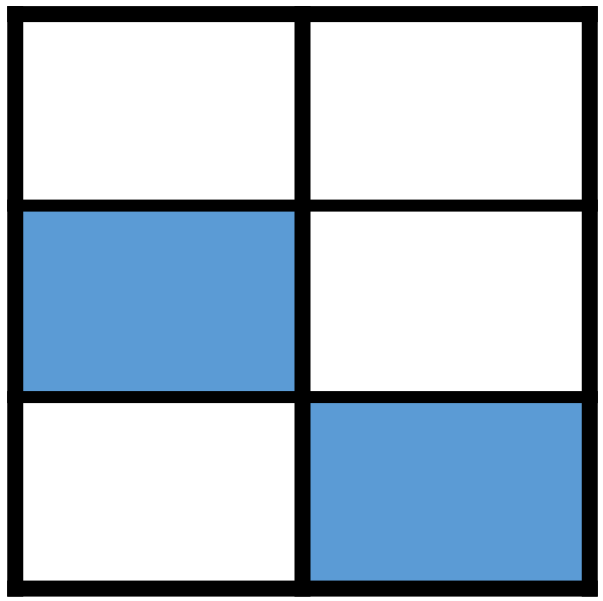
$$\frac{1}{3}$$

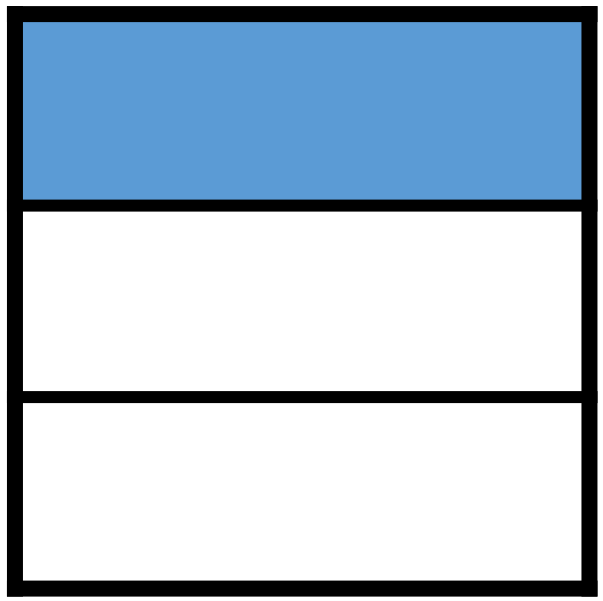




Task 35: Fraction of a shape

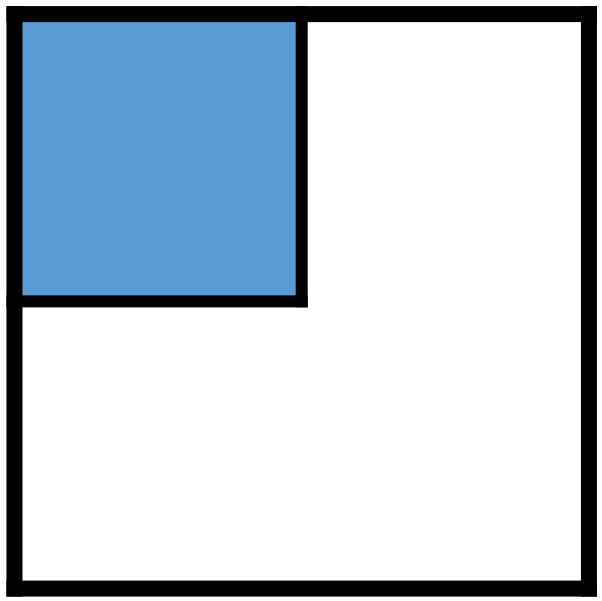
$$\frac{1}{3}$$

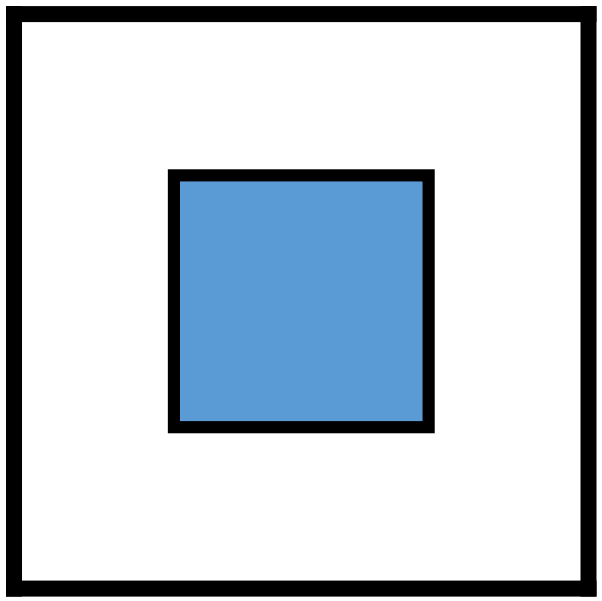


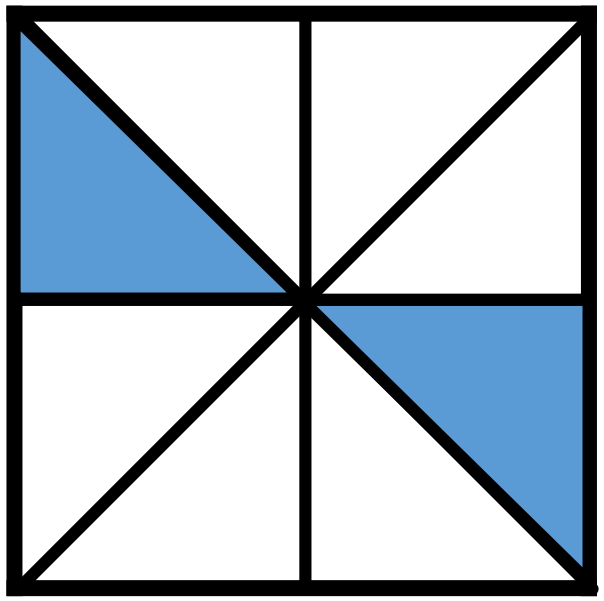


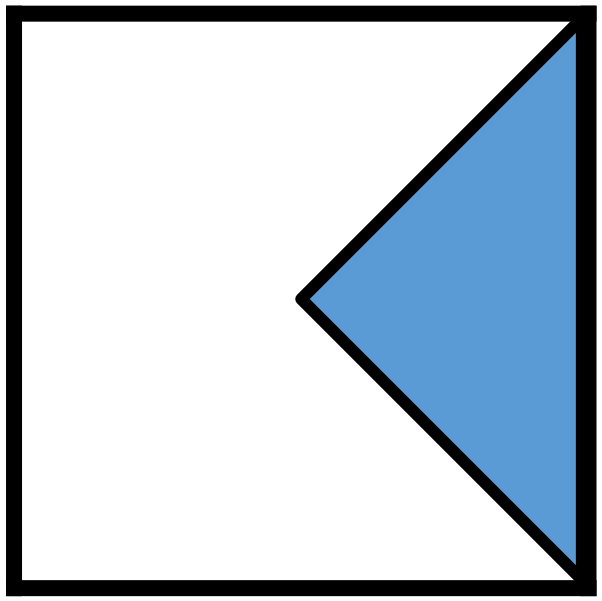
Task 35: Fraction of a shape

$$\frac{1}{4}$$



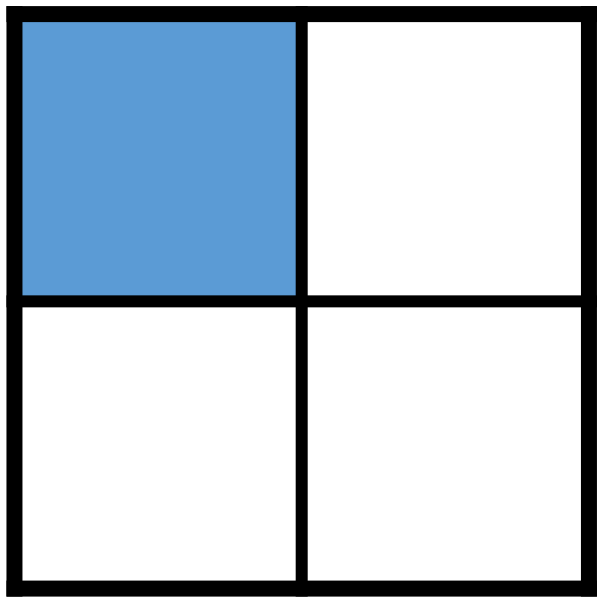


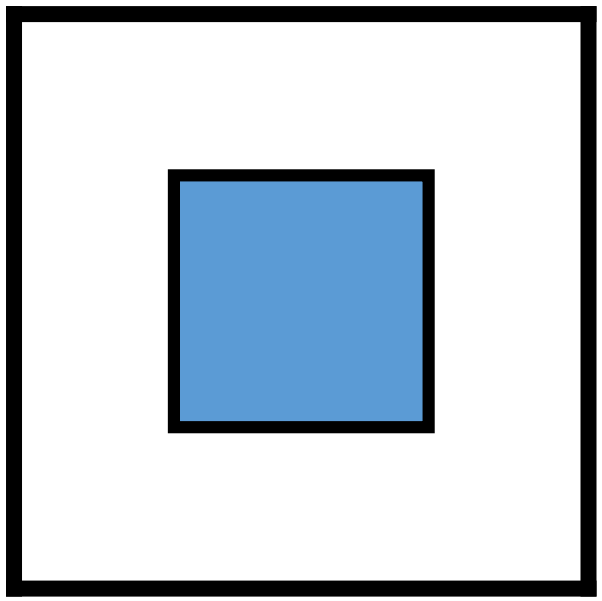


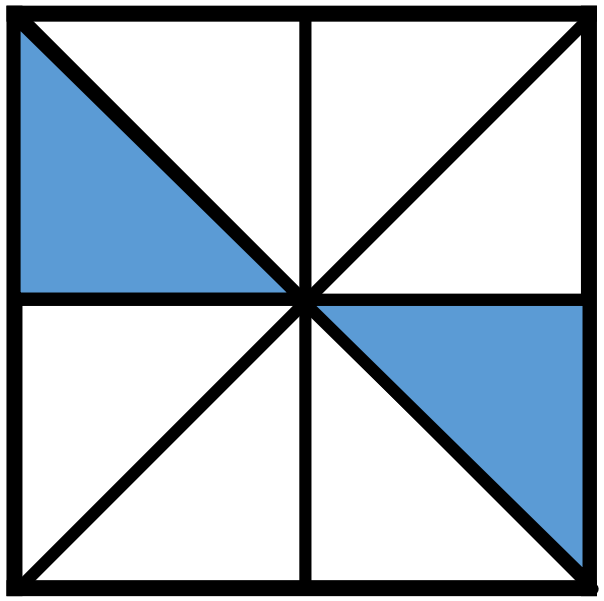


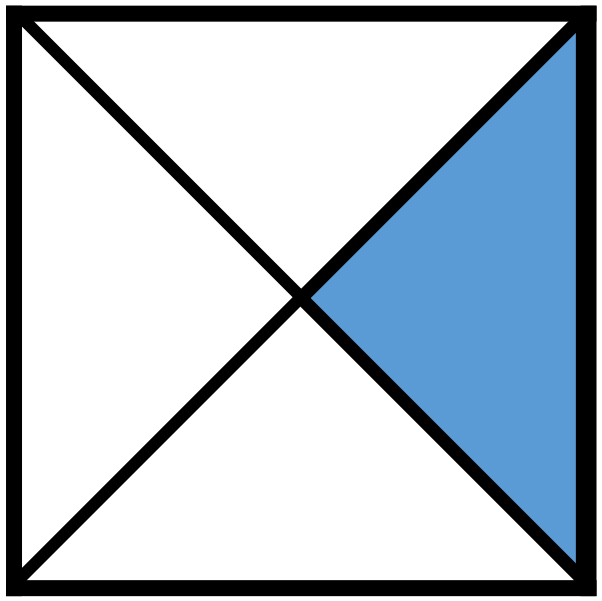
Task 35: Fraction of a shape

$$\frac{1}{4}$$



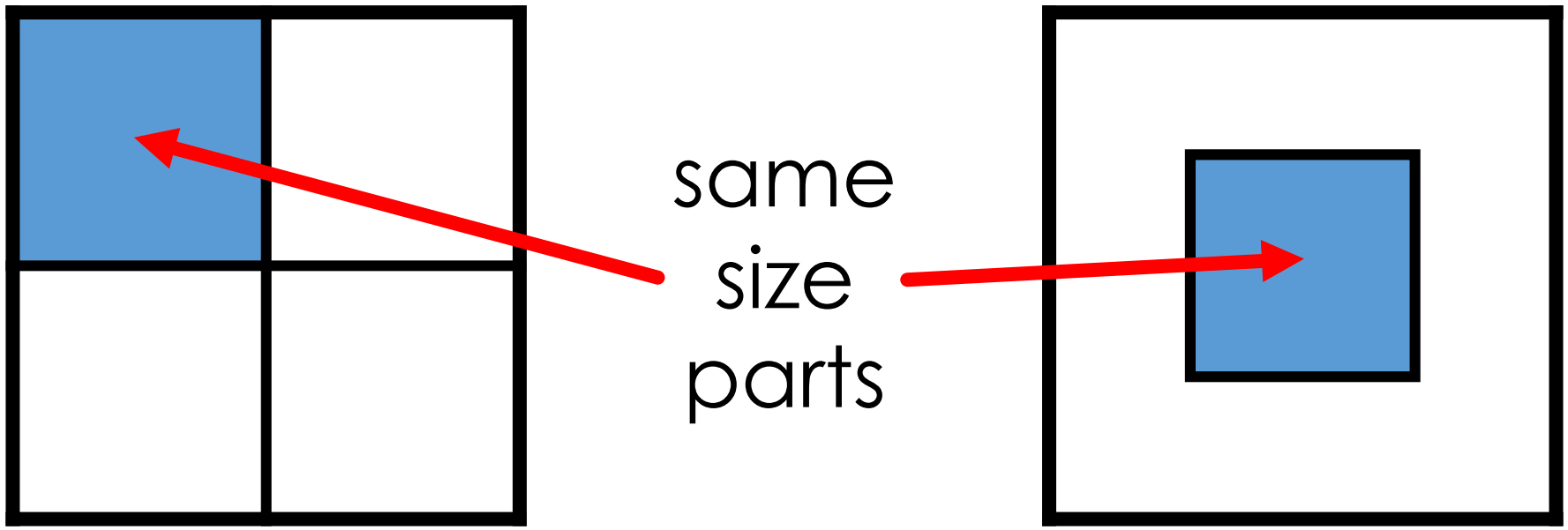


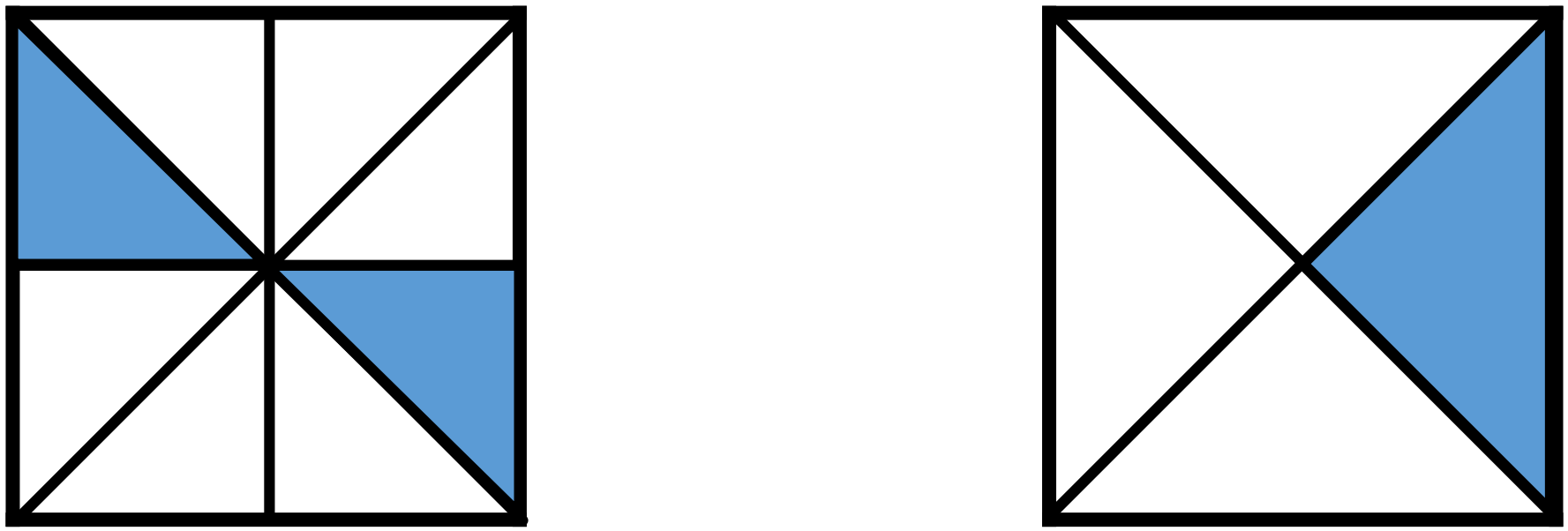




Task 35: Fraction of a shape

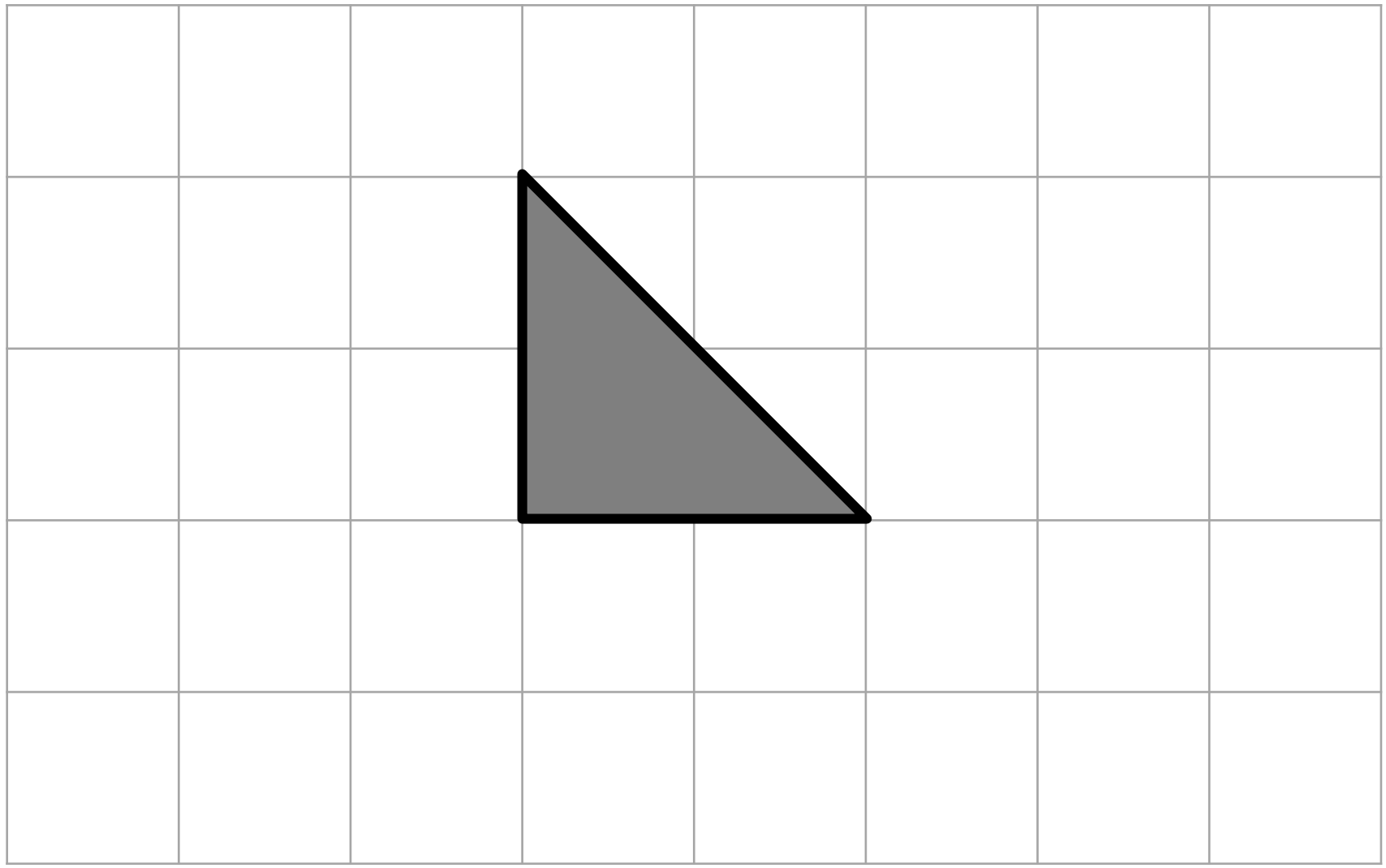
$$\frac{1}{4}$$





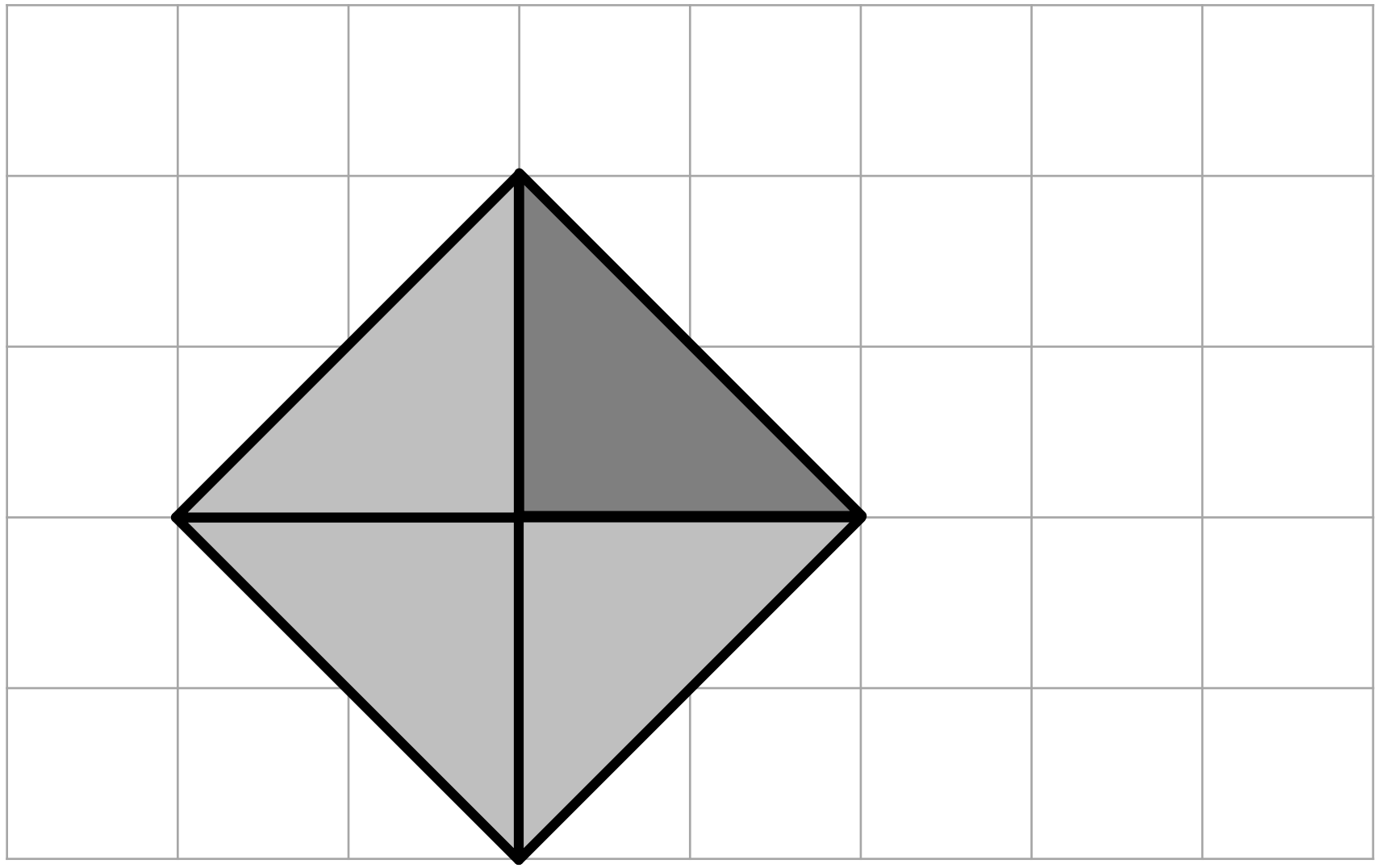
Task 36: Parts and the whole

Example 1



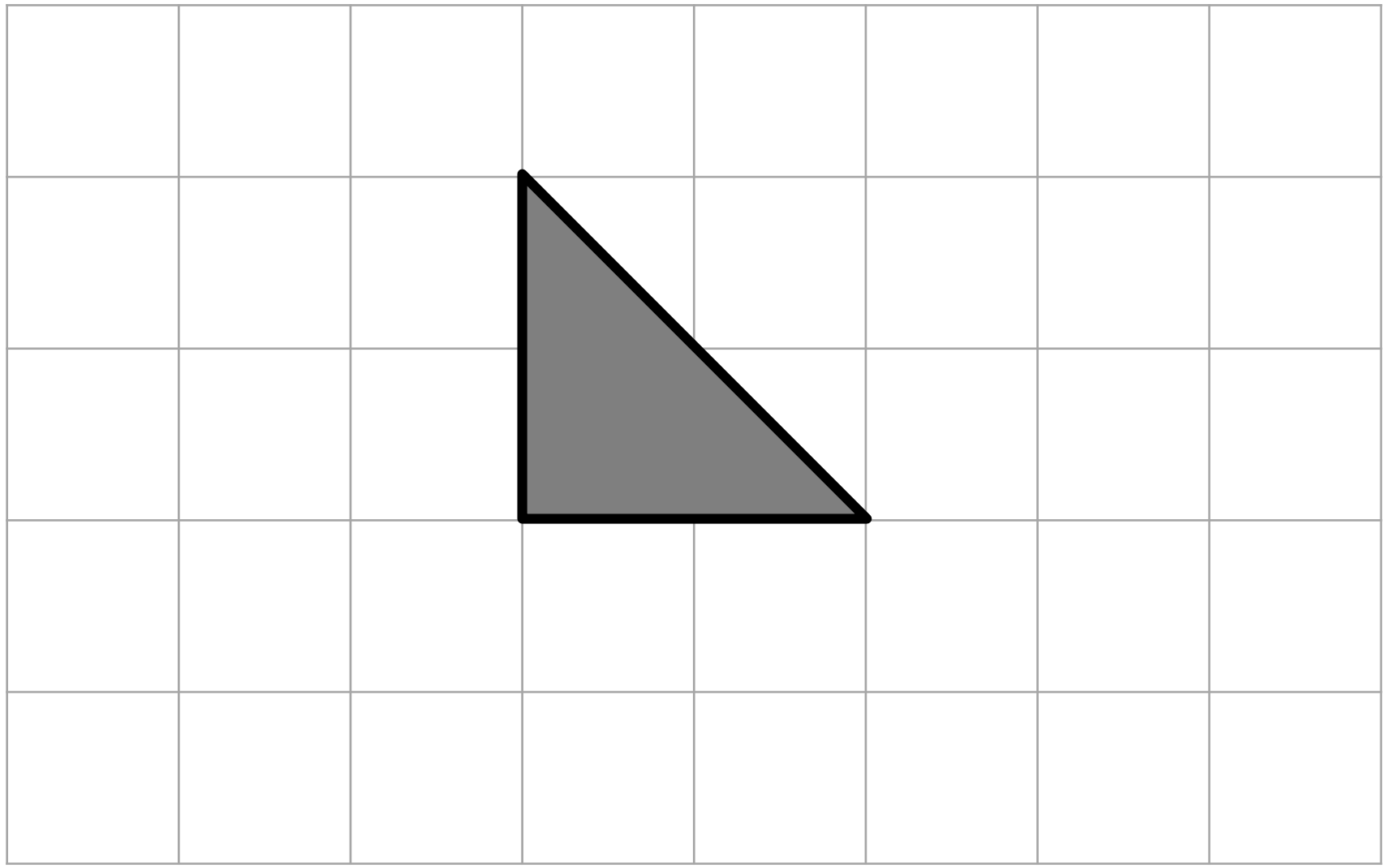
Task 36: Parts and the whole

Example 1



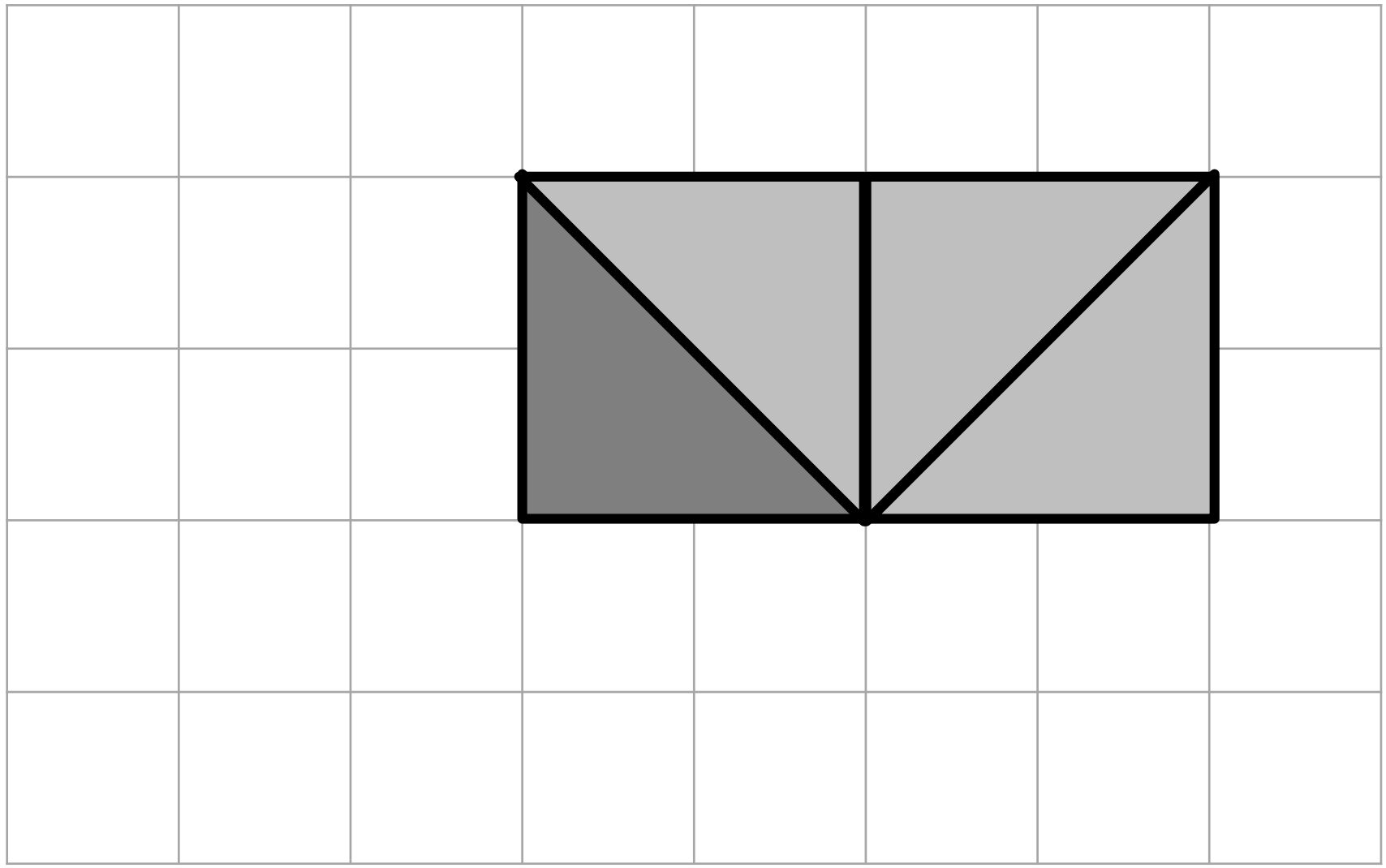
Task 36: Parts and the whole

Example 2



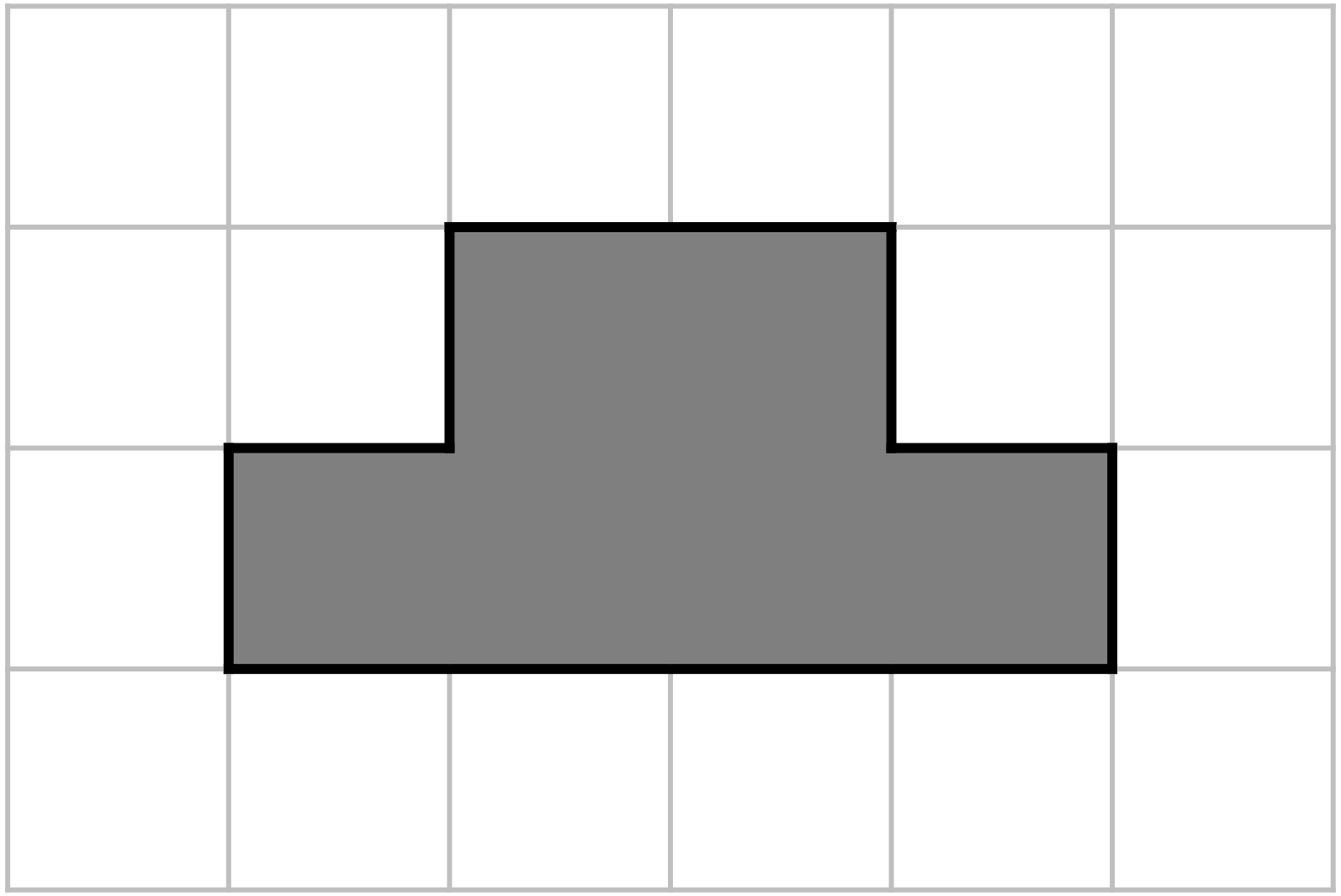
Task 36: Parts and the whole

Example 2



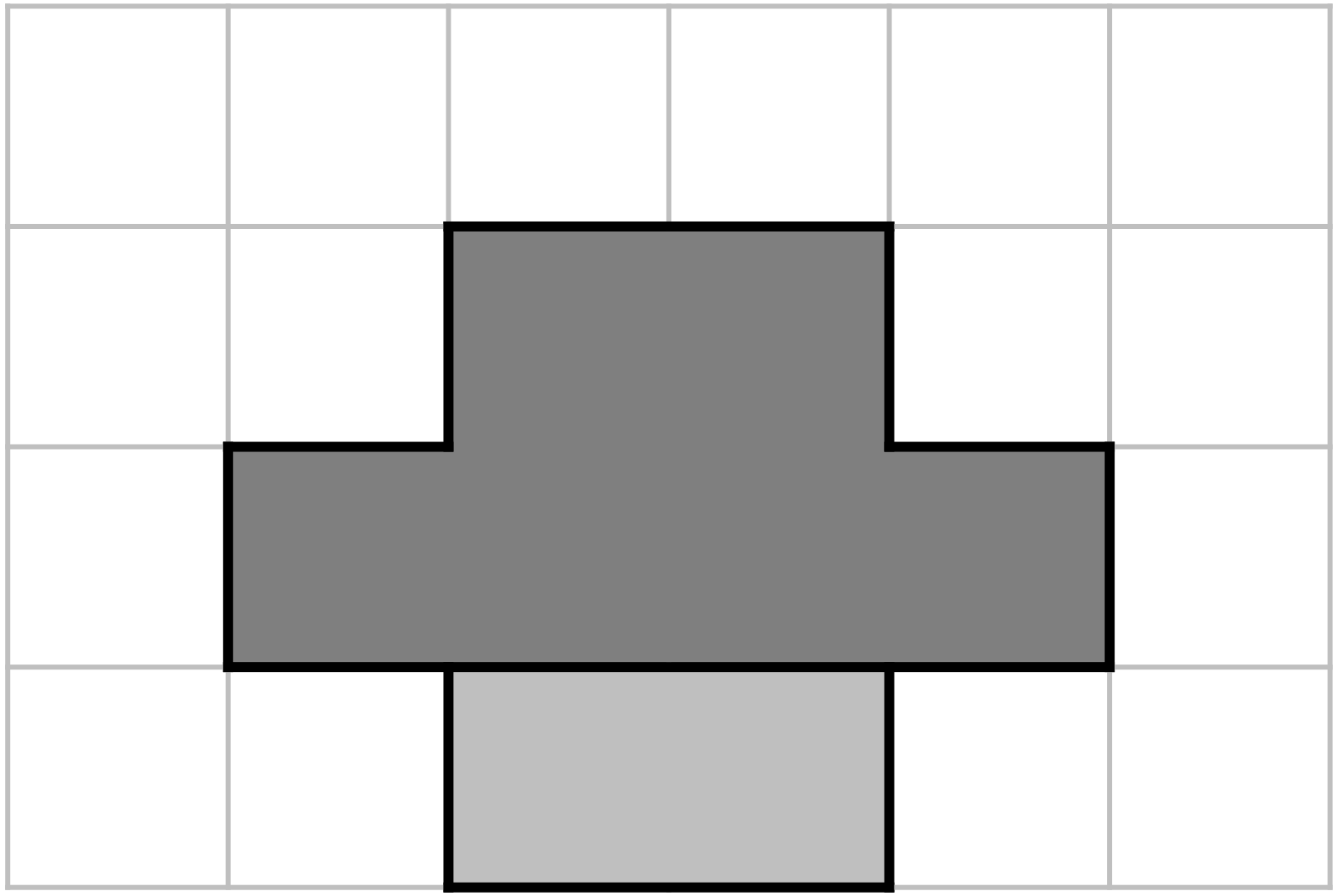
Task 36: Parts and the whole

Example 3



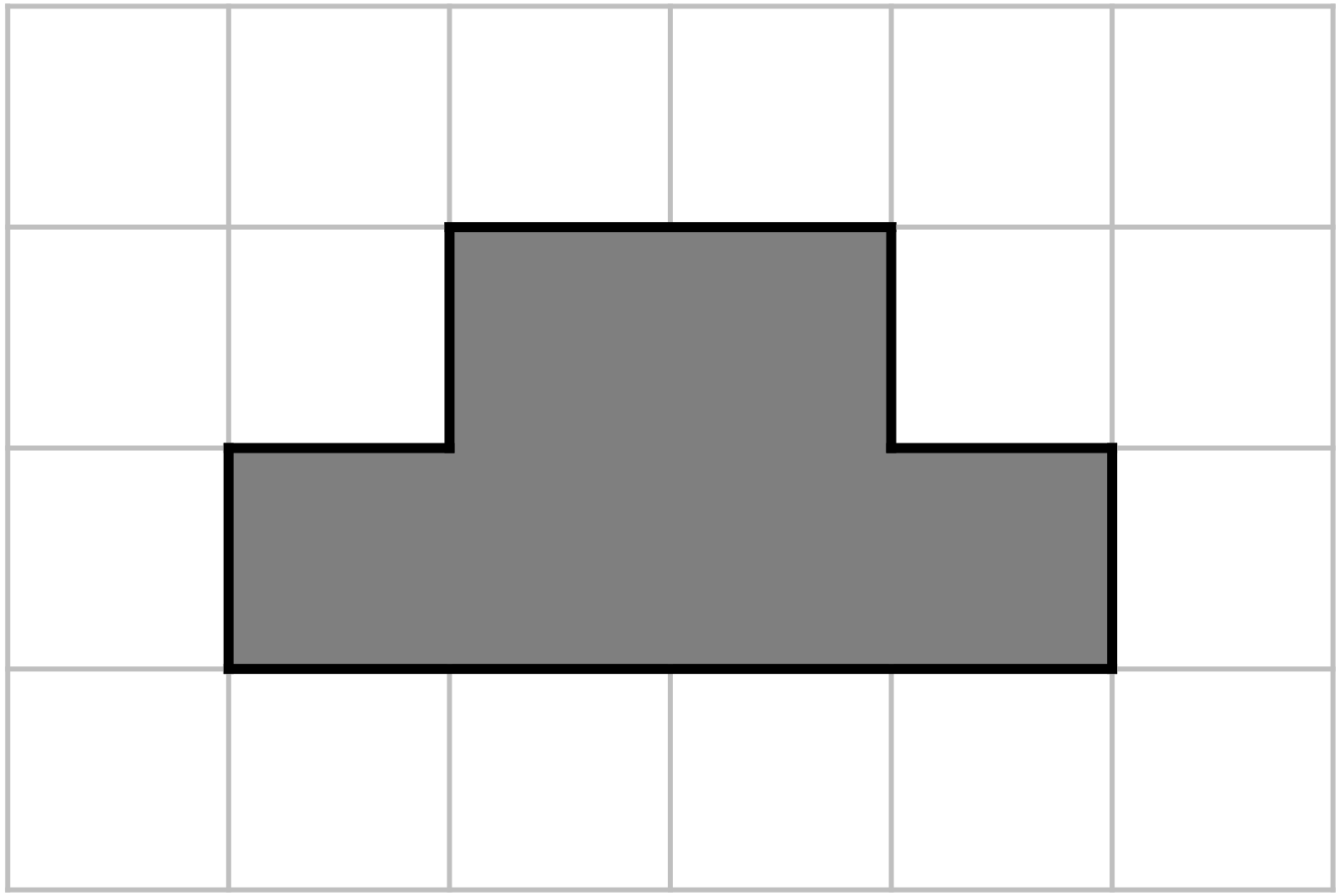
Task 36: Parts and the whole

Example 3



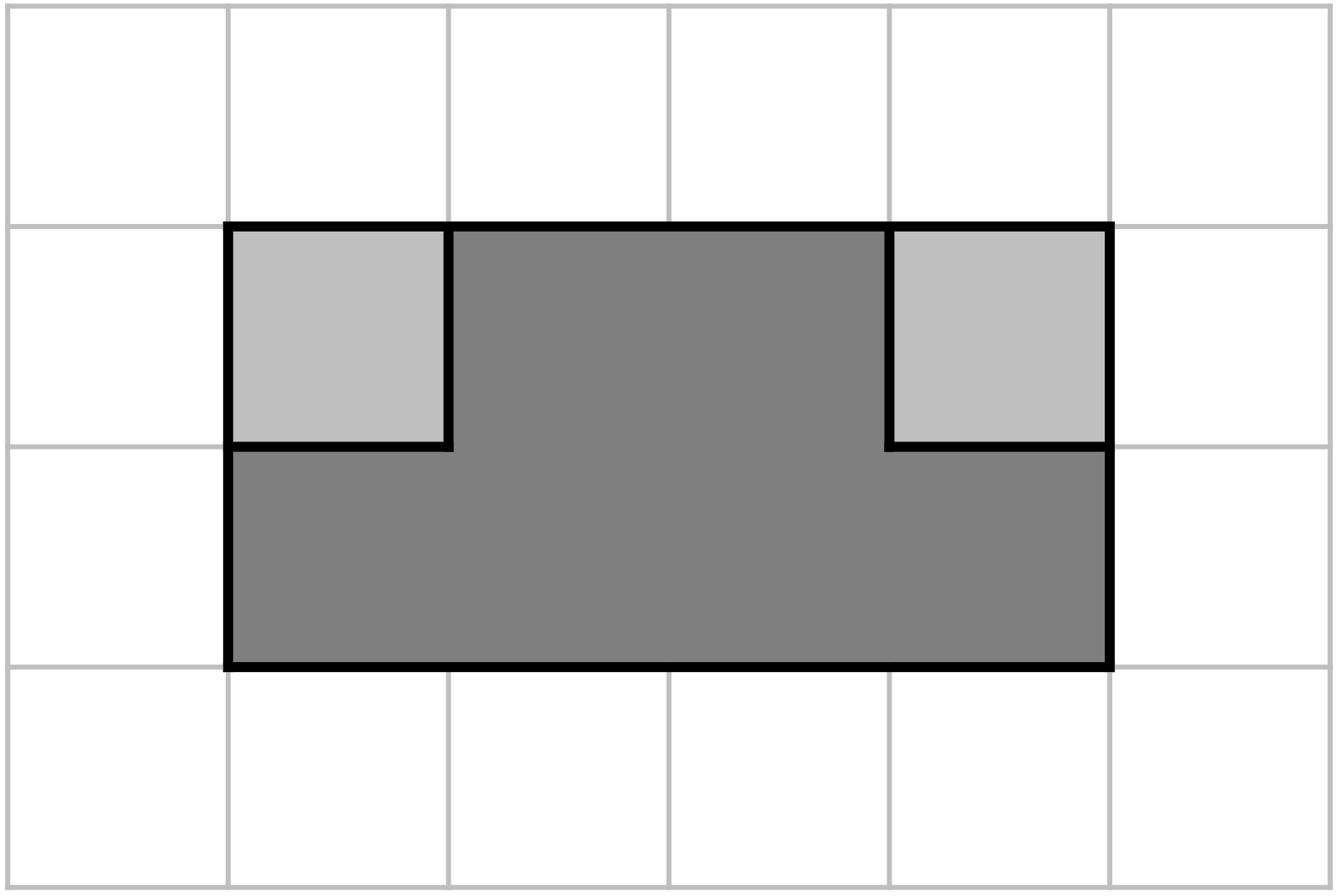
Task 36: Parts and the whole

Example 4

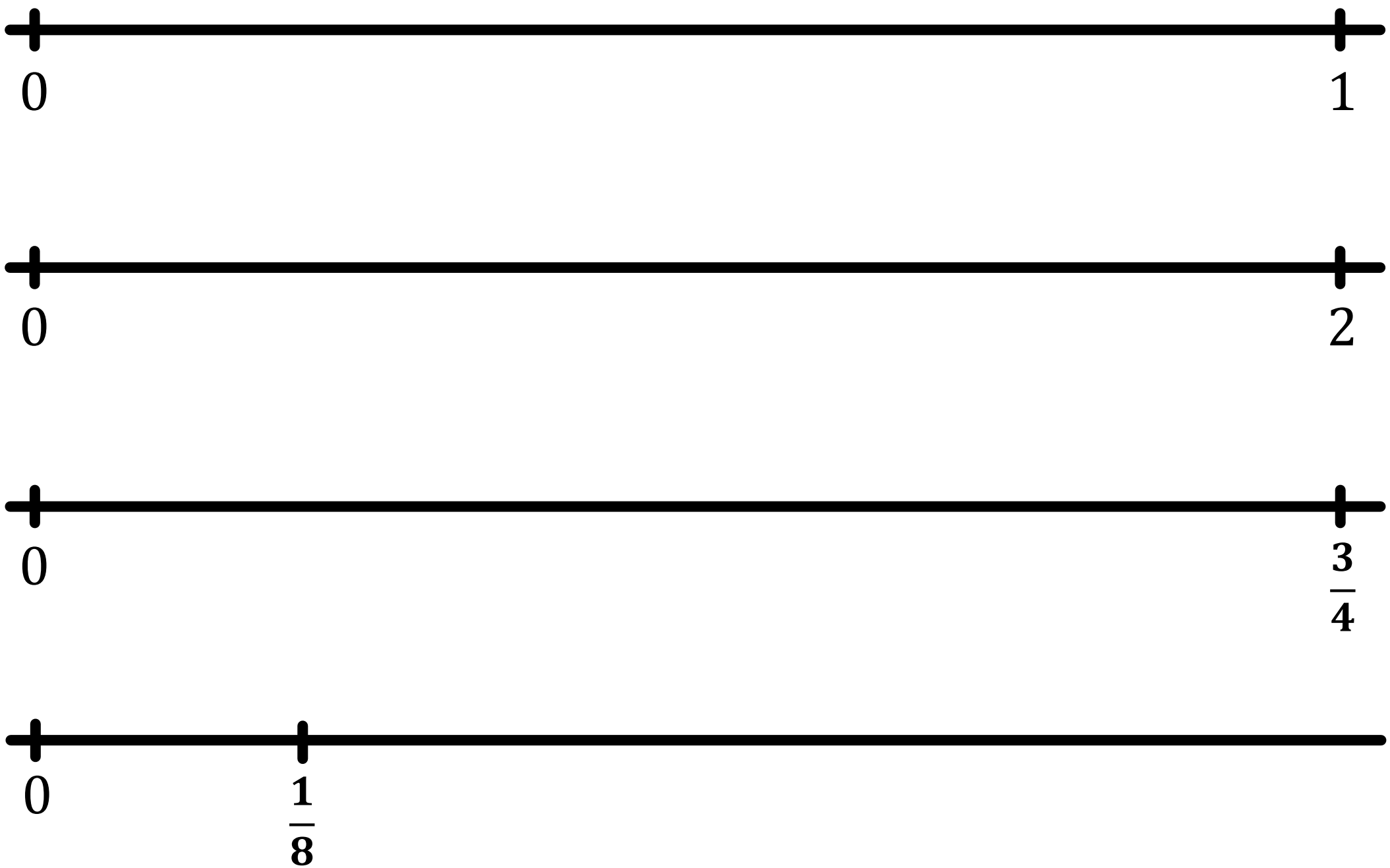


Task 36: Parts and the whole

Example 4

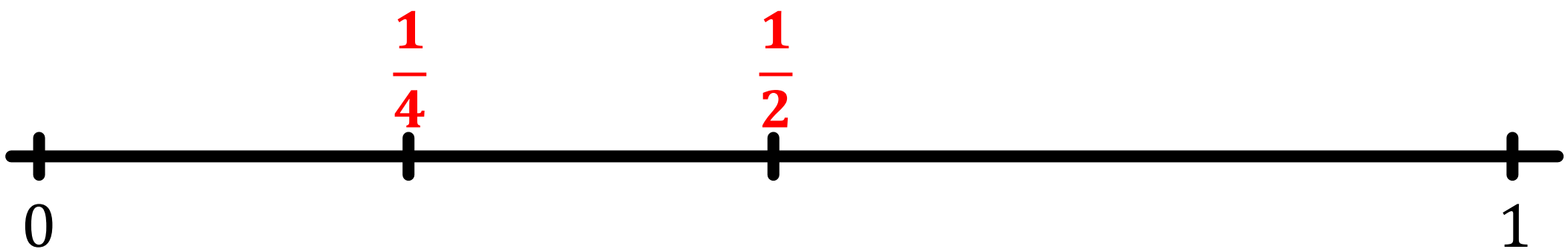


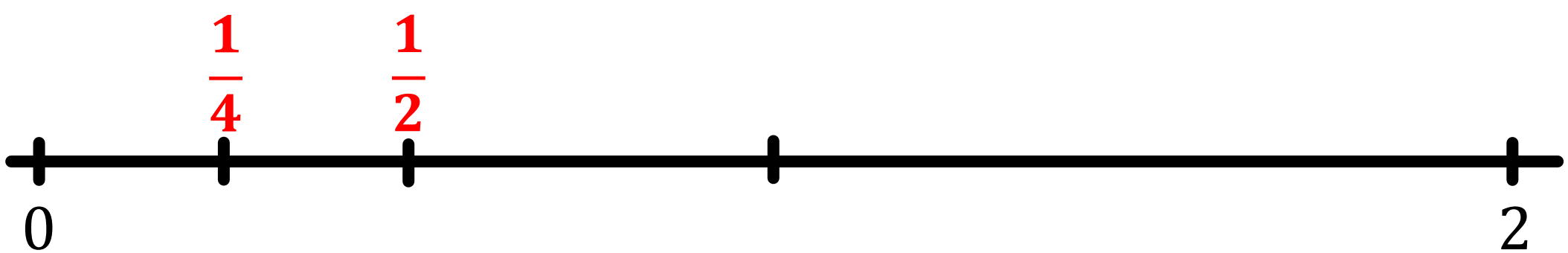
Task 37: Fractions on a line



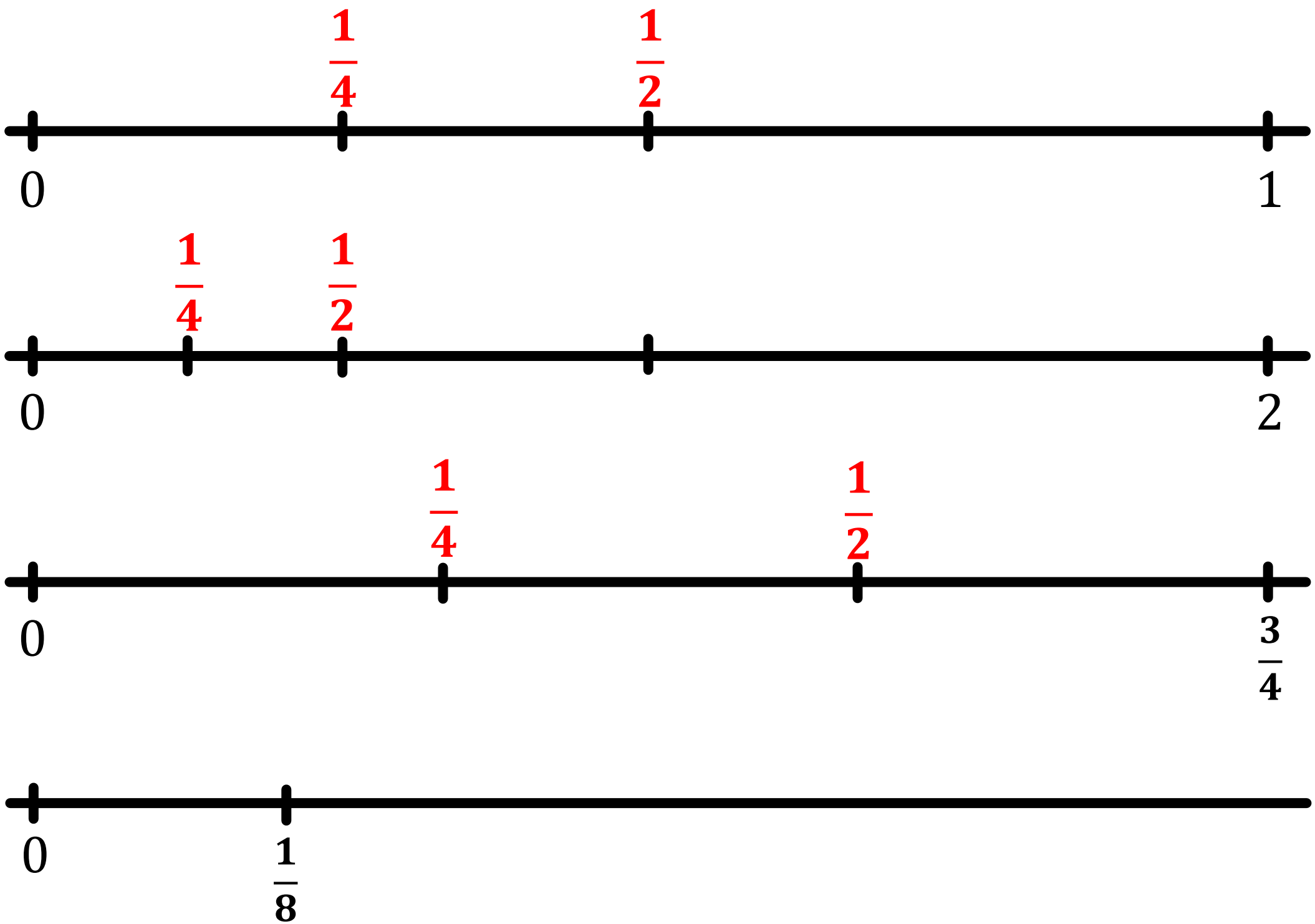
Task 37: Fractions on a line

Task 37: Fractions on a line

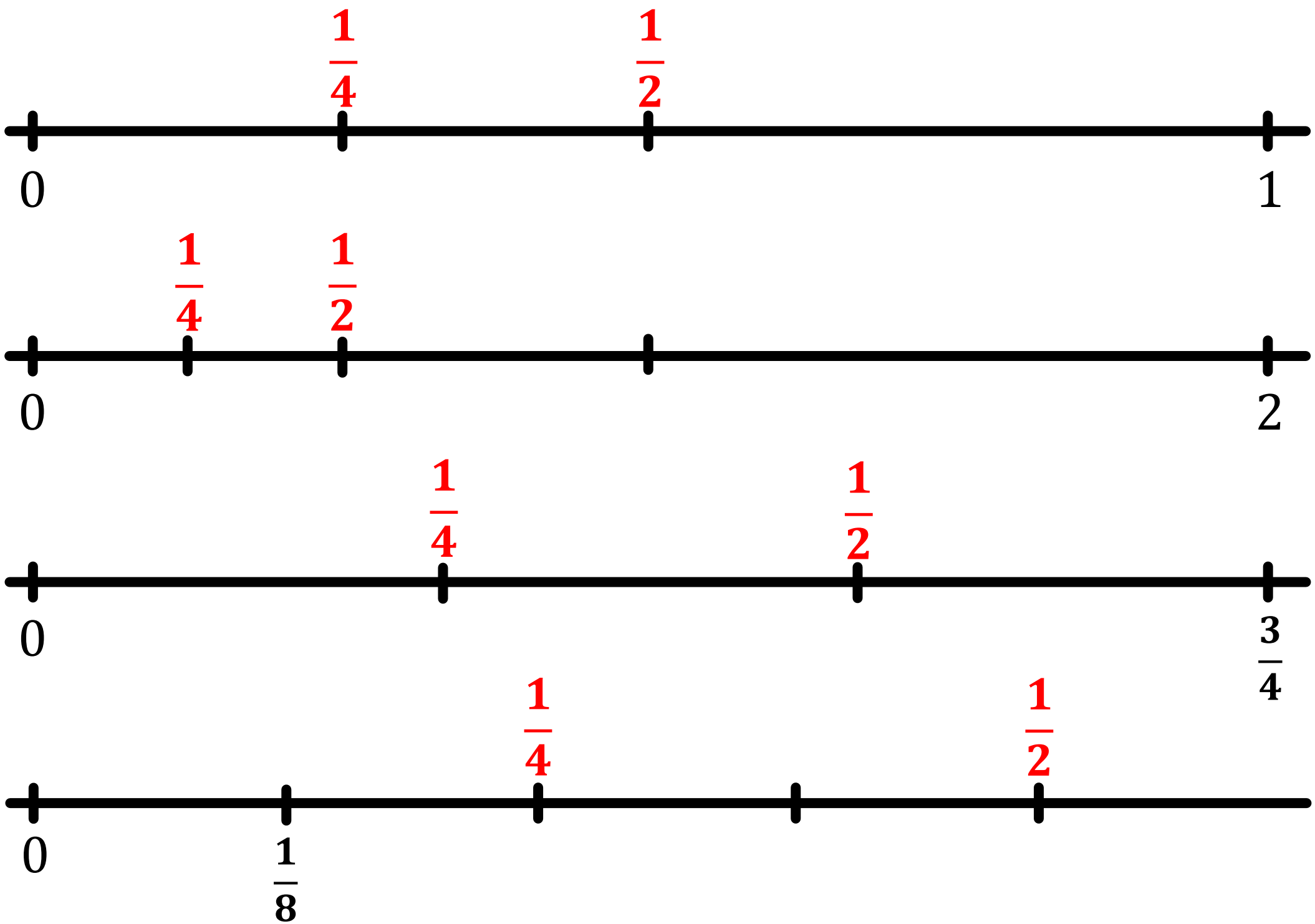




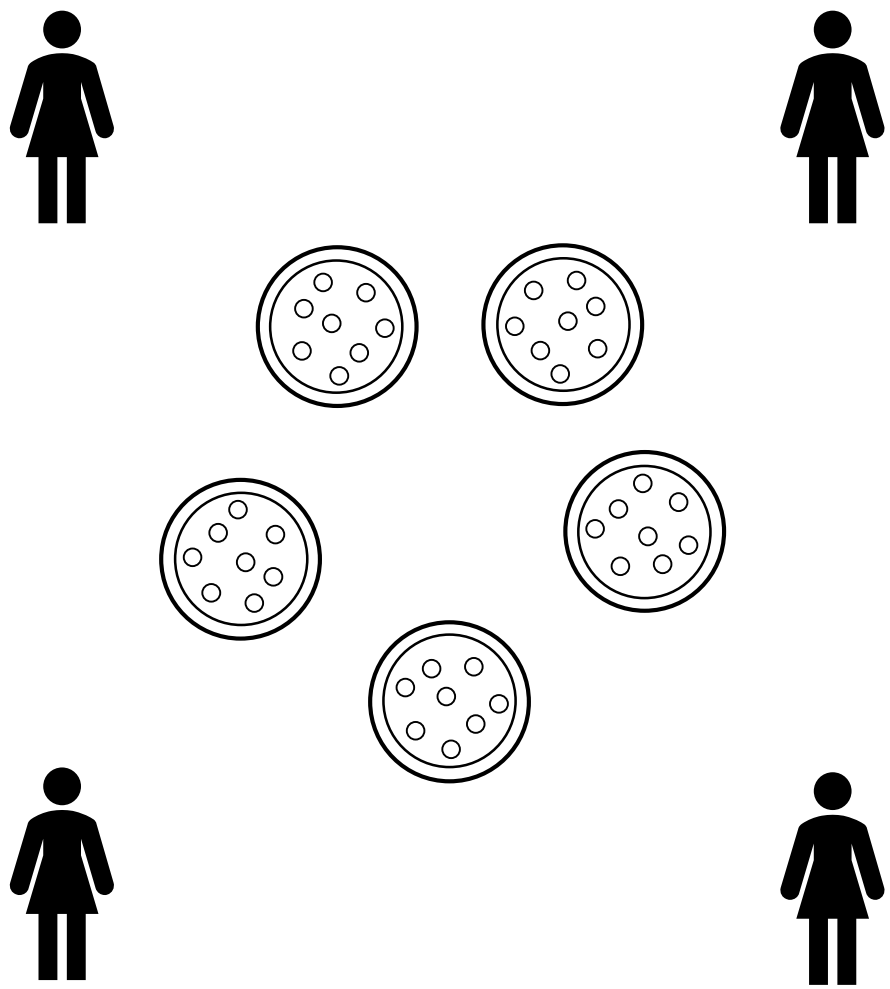
Task 37: Fractions on a line

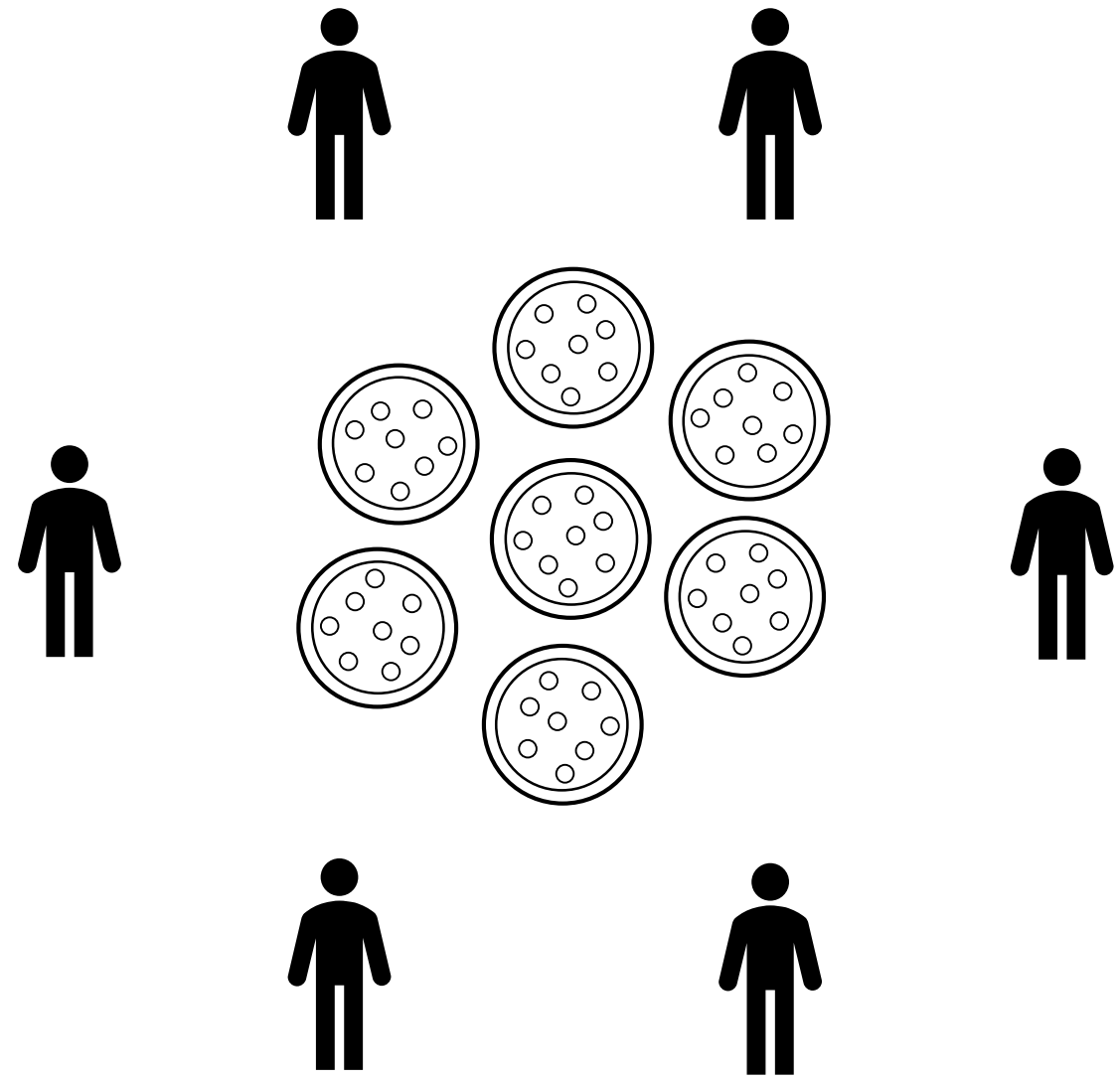


Task 37: Fractions on a line

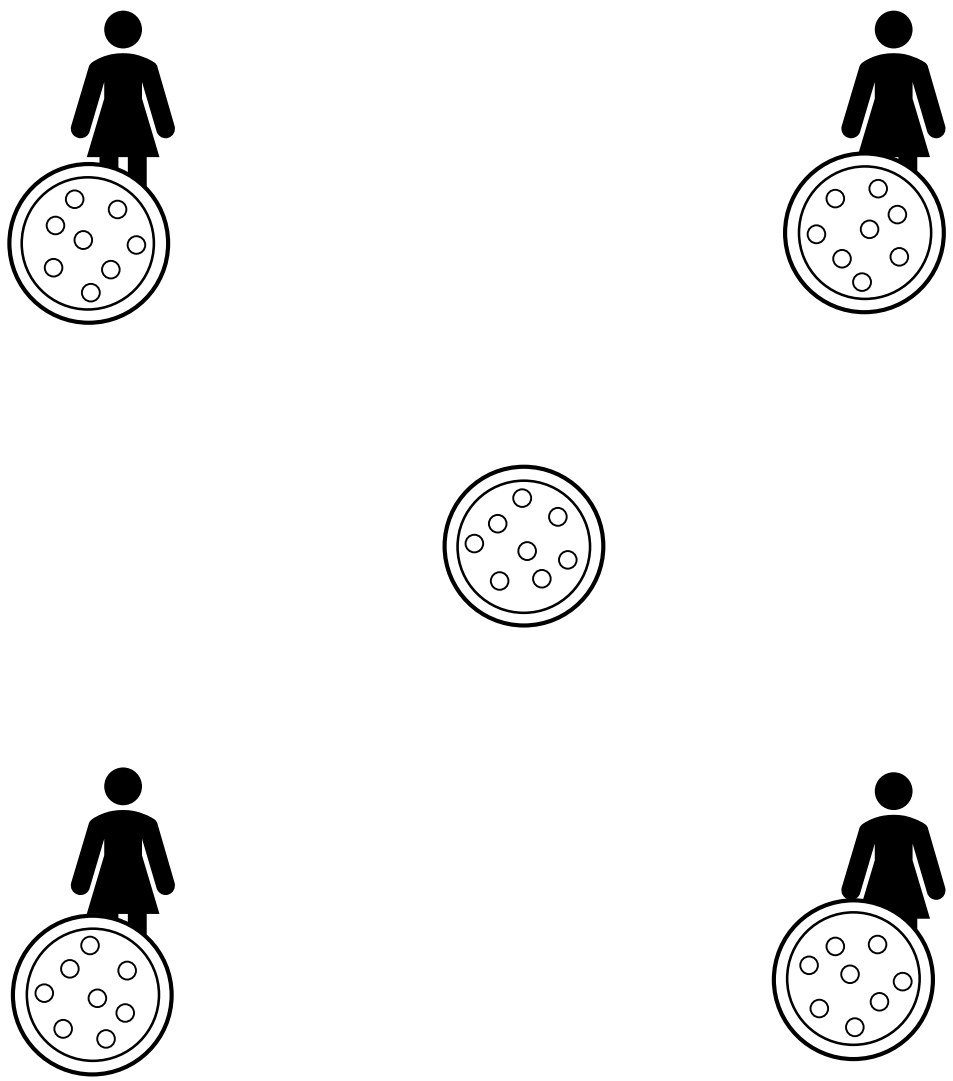


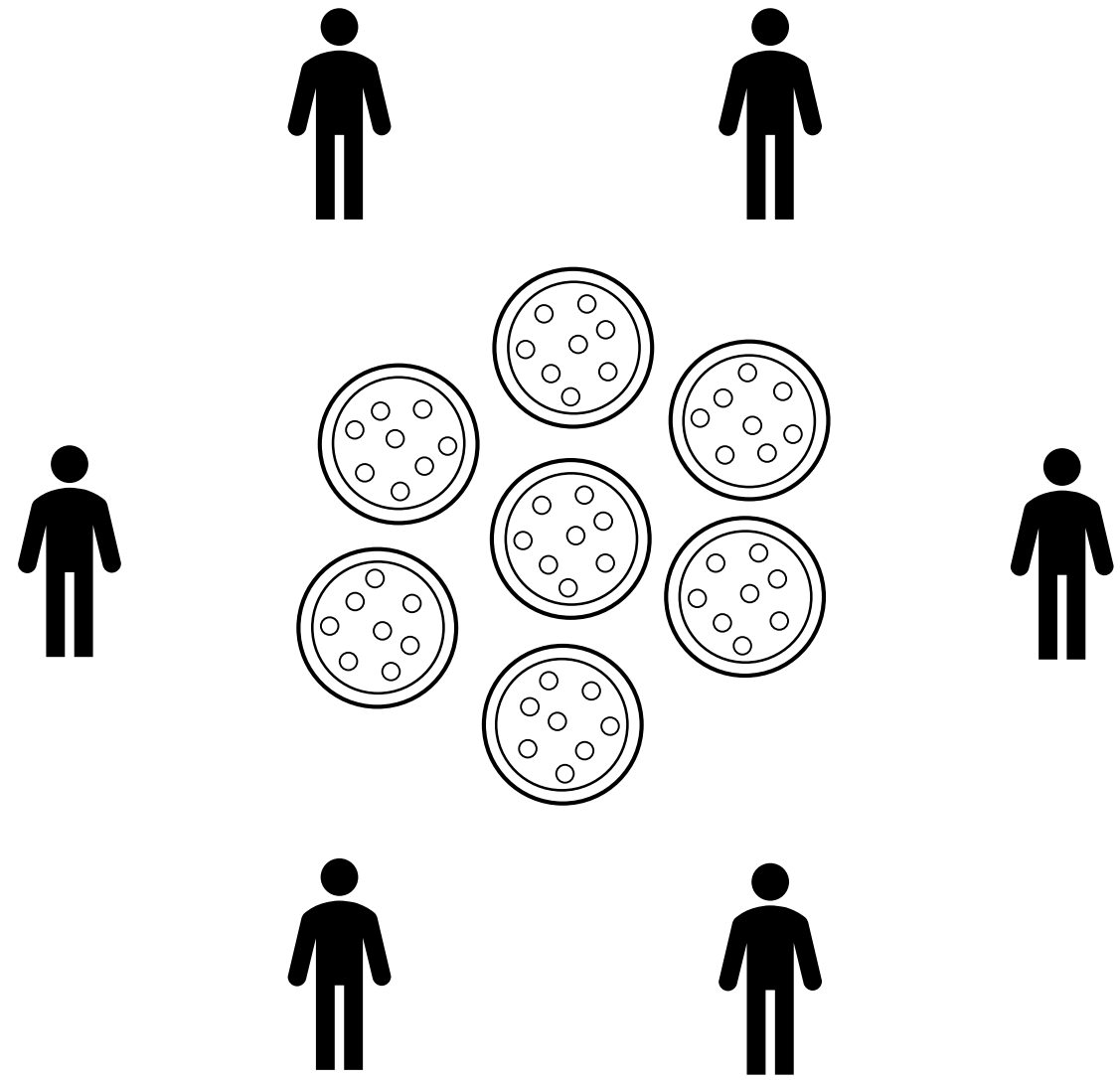
Task 38: Sharing contexts



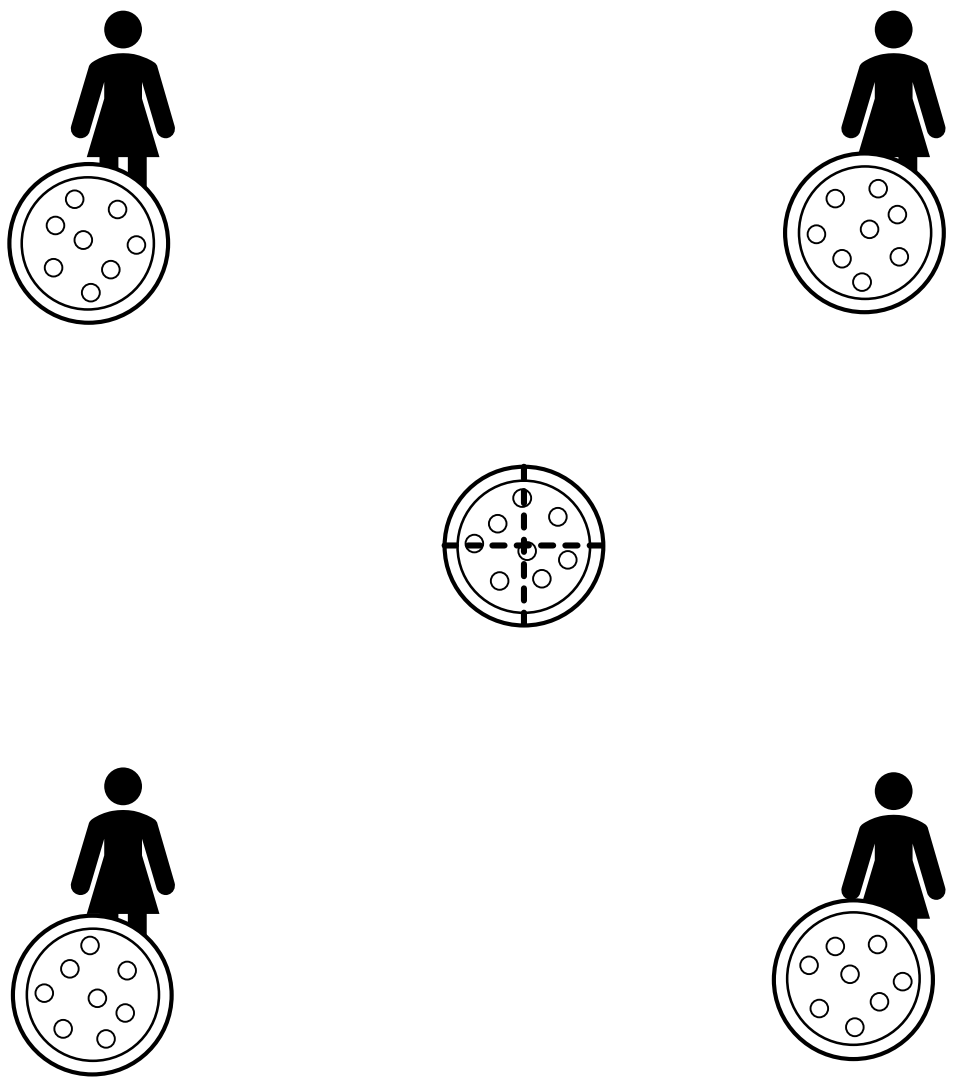


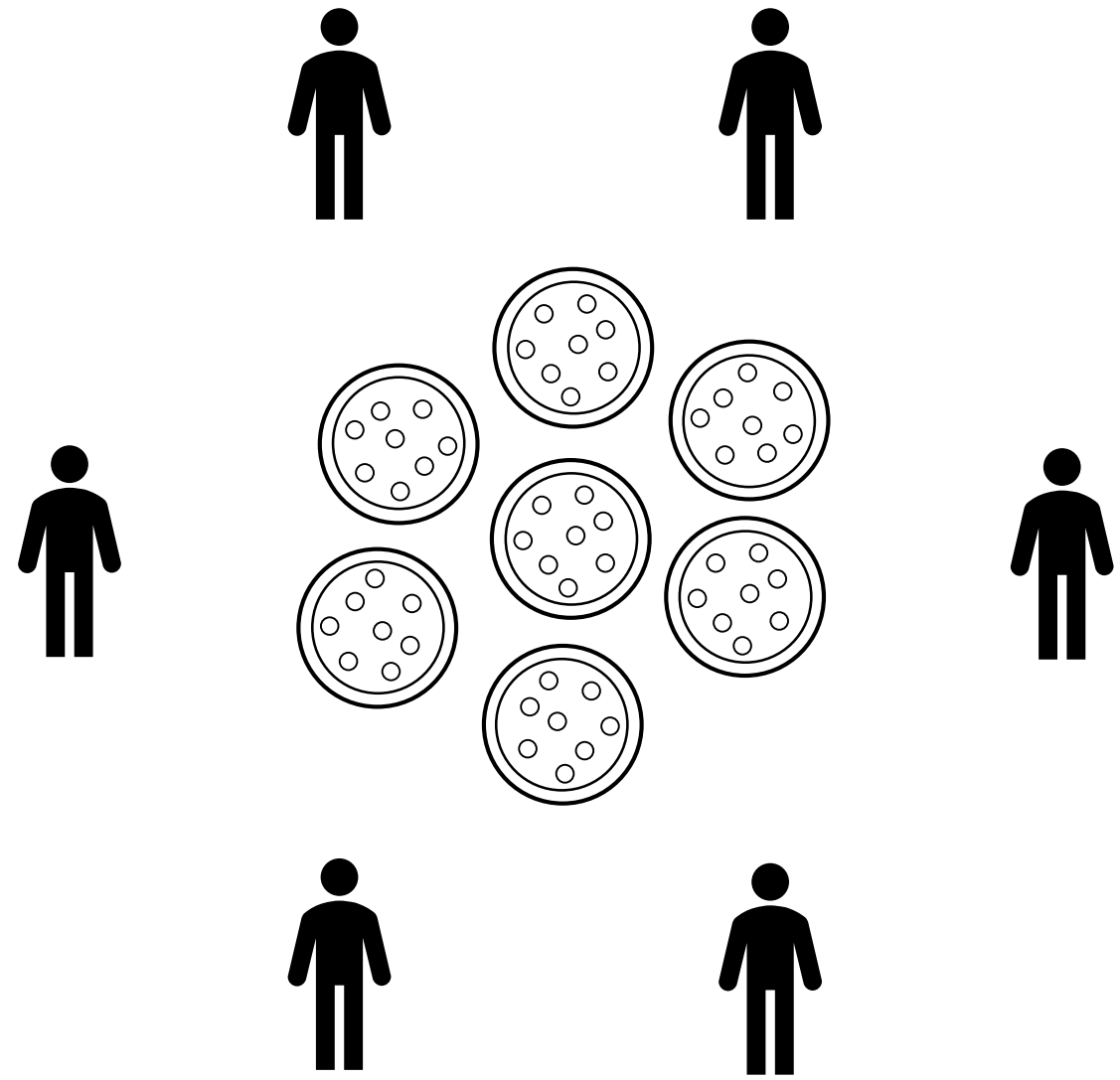
Task 38: Sharing contexts



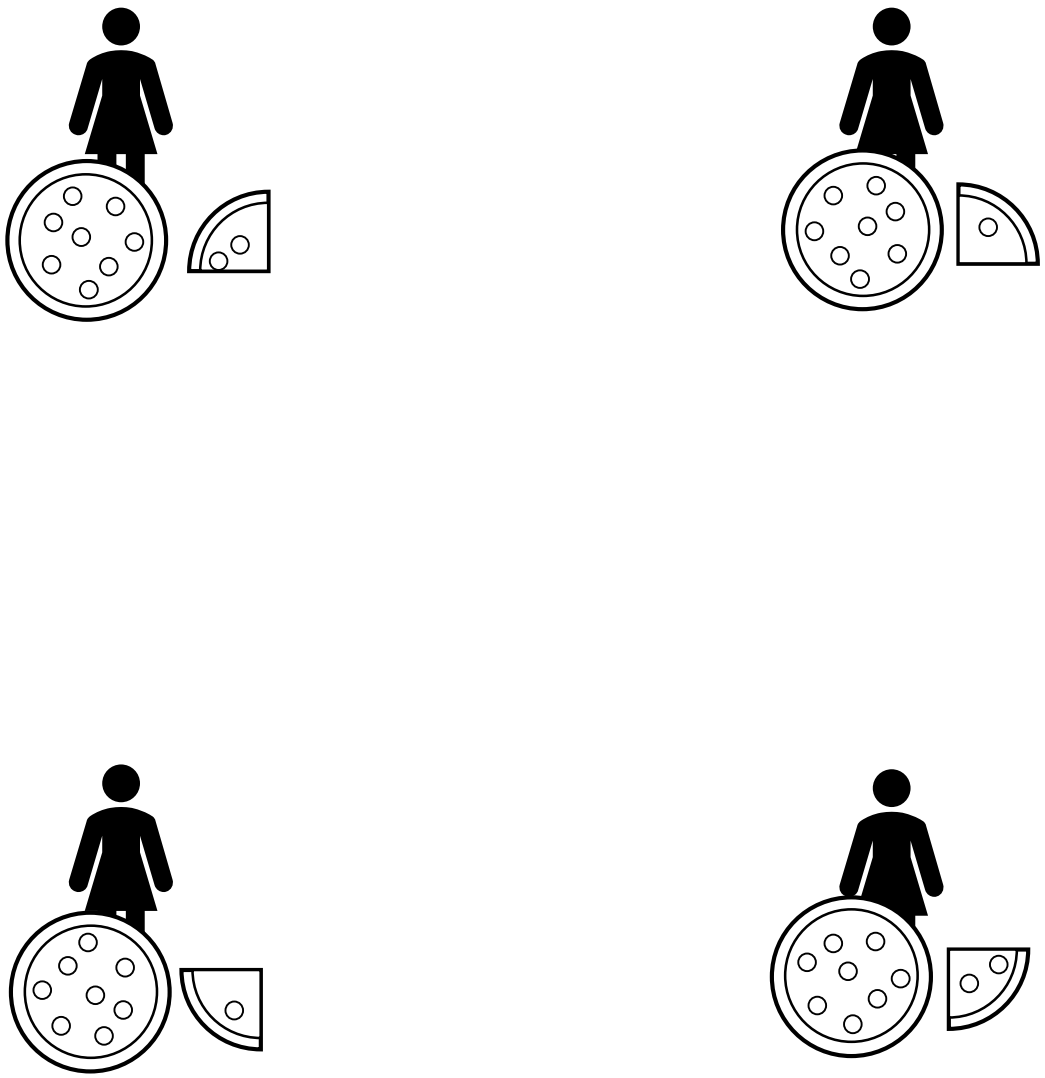


Task 38: Sharing contexts

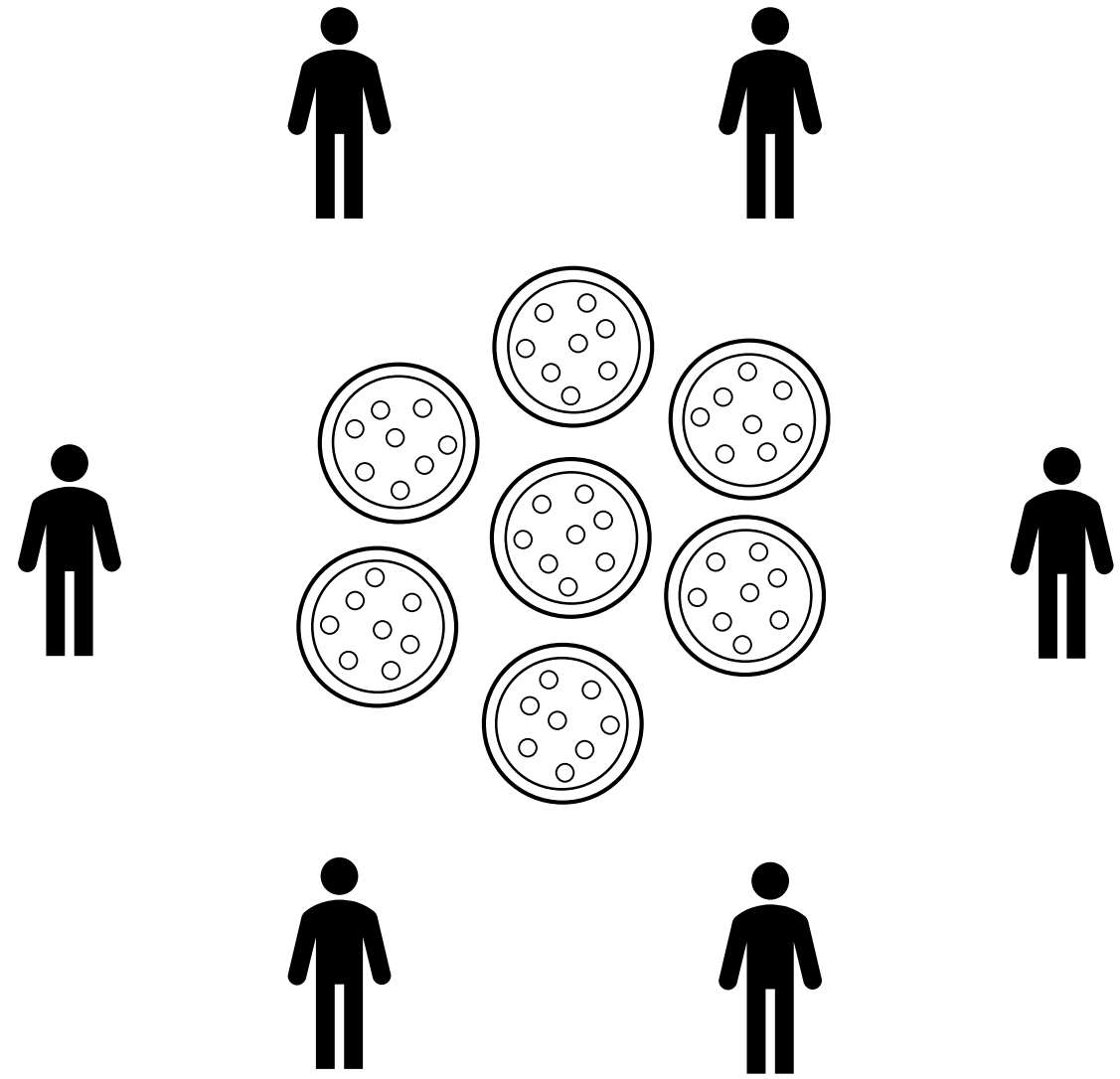




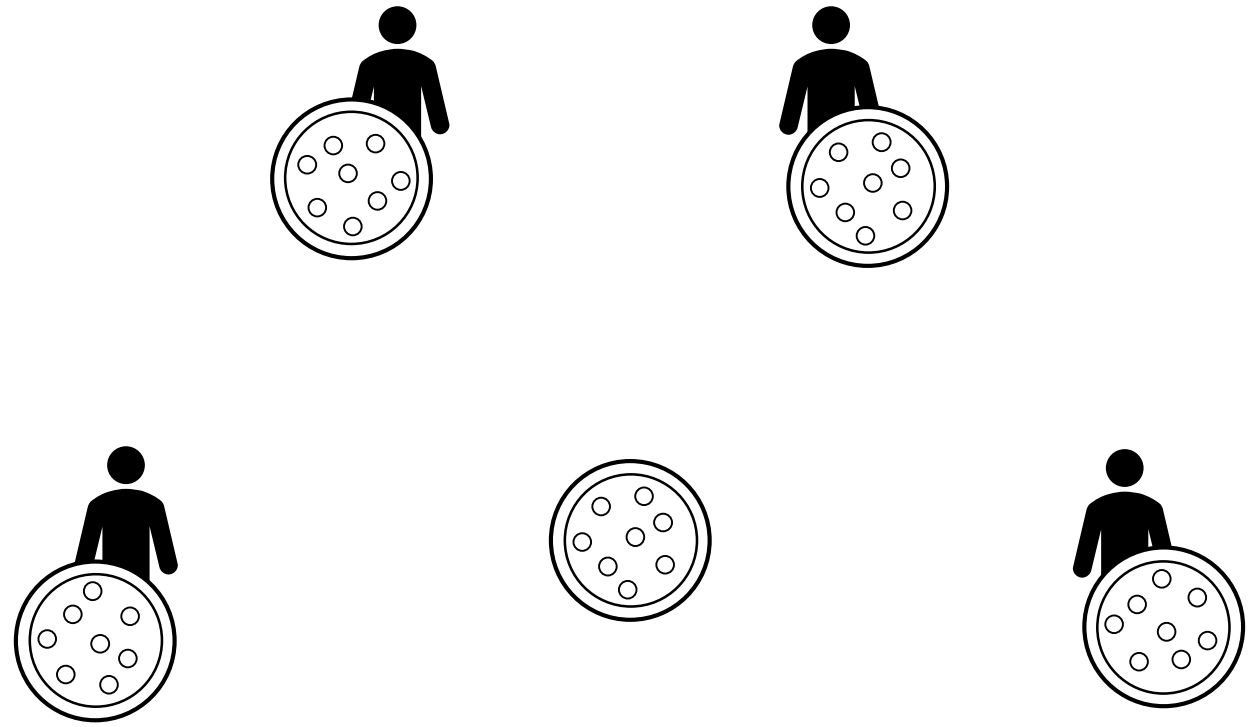
Task 38: Sharing contexts



$1\frac{1}{4}$ pizzas each



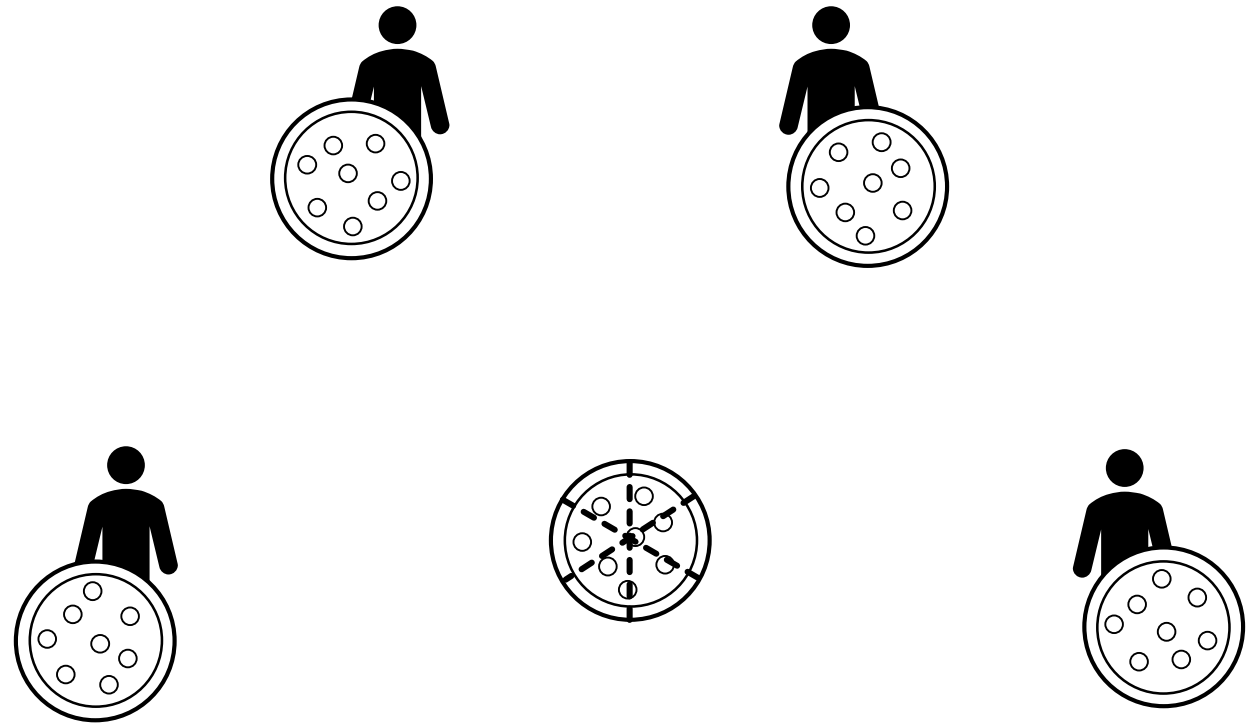
Task 38: Sharing contexts



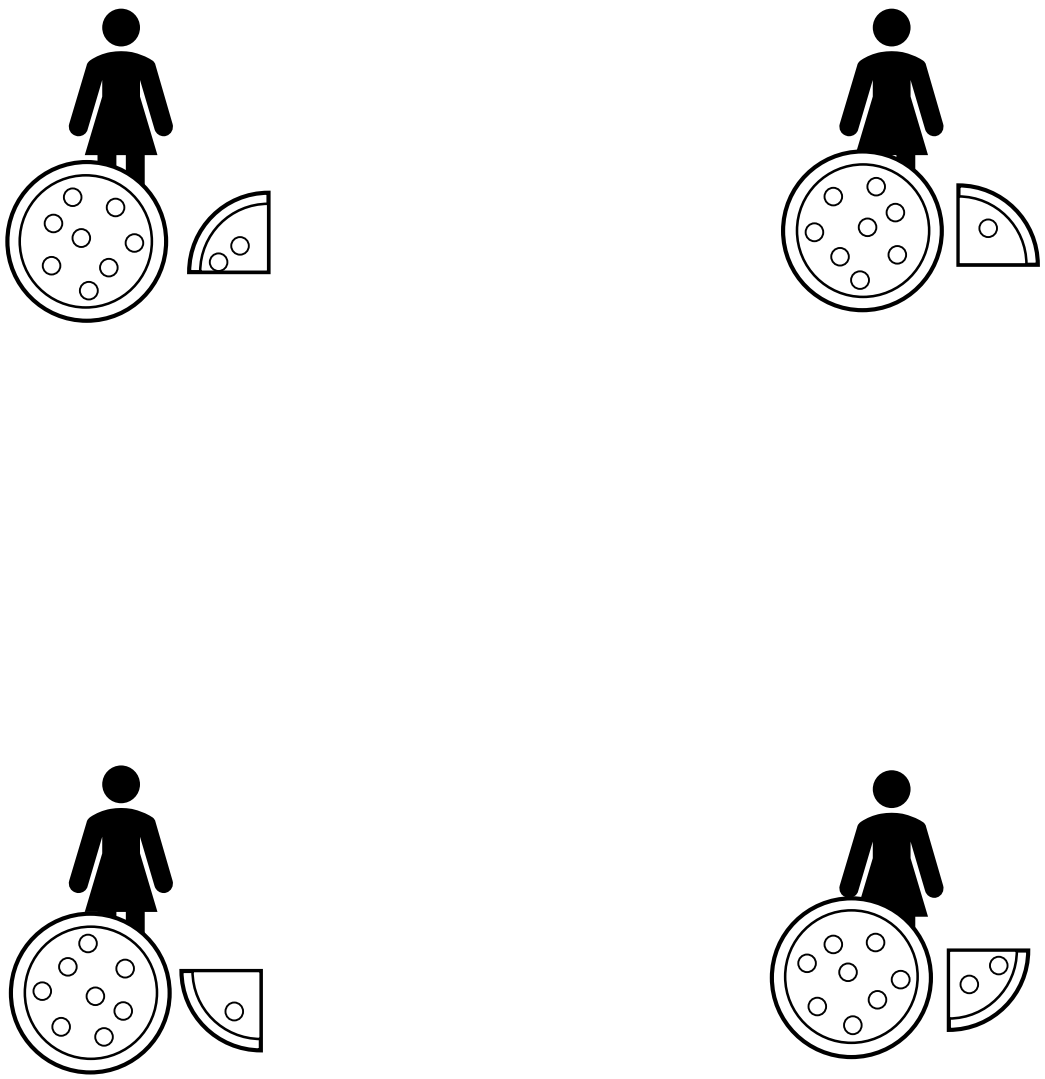
$1\frac{1}{4}$ pizzas each

Task 38: Sharing contexts

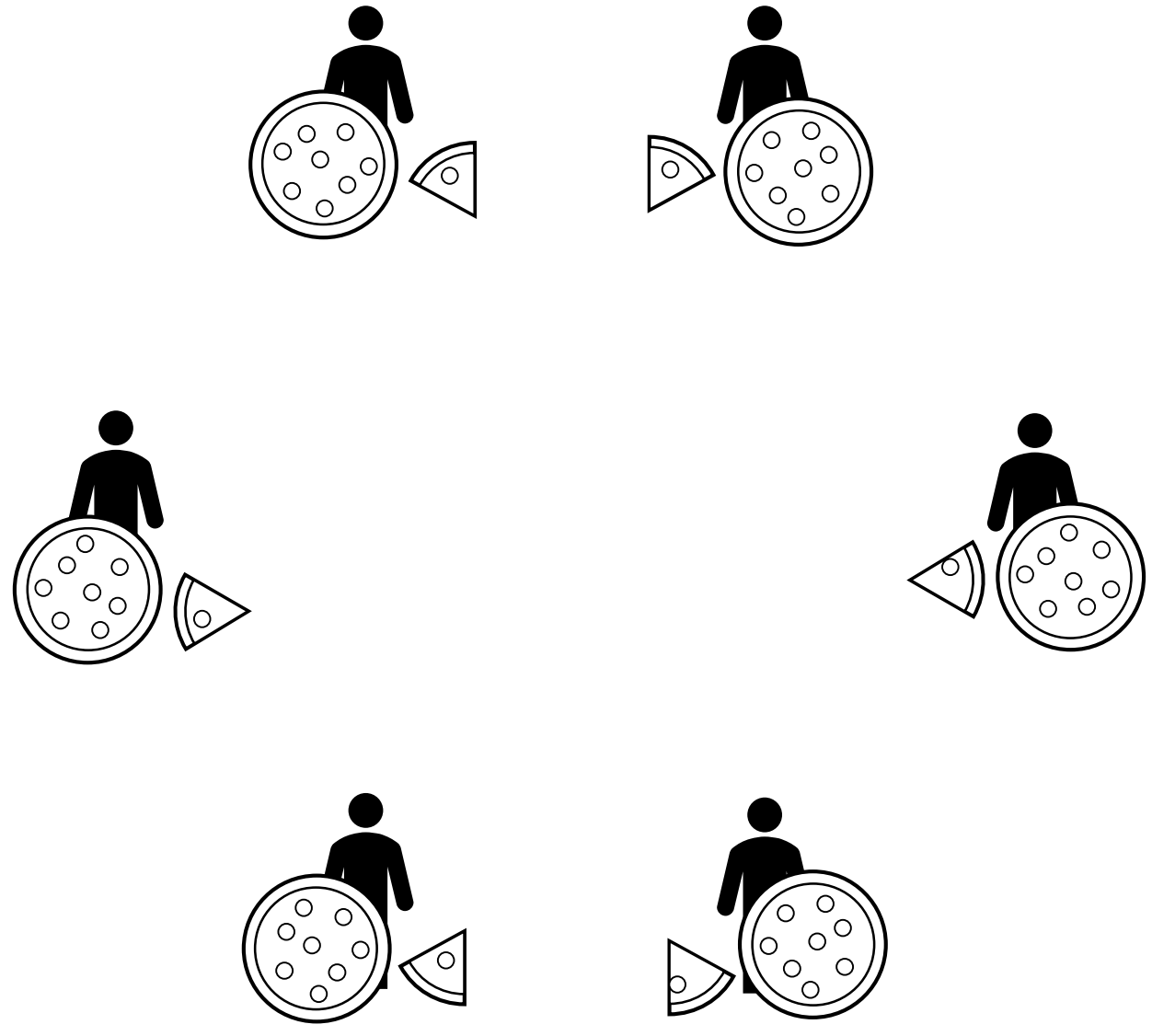
$1\frac{1}{4}$ pizzas each



Task 38: Sharing contexts



$1\frac{1}{4}$ pizzas each



$1\frac{1}{6}$ pizzas each

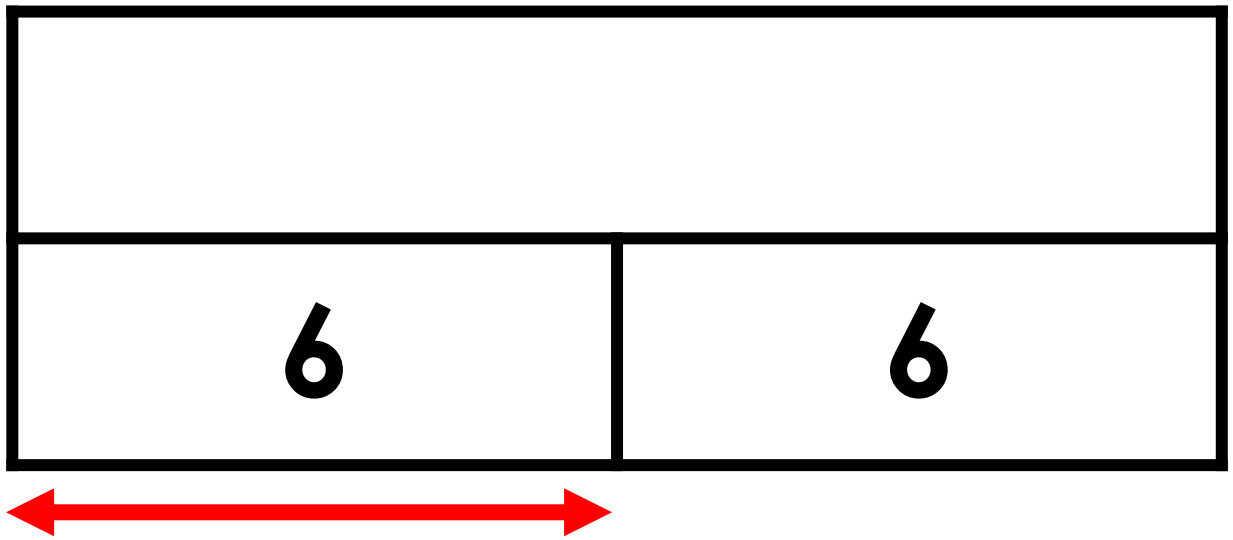
Task 39: Fraction of a number

$$\frac{1}{\square} \text{ of } \square = 6$$

Task 39: Fraction of a number

Example answer 1:

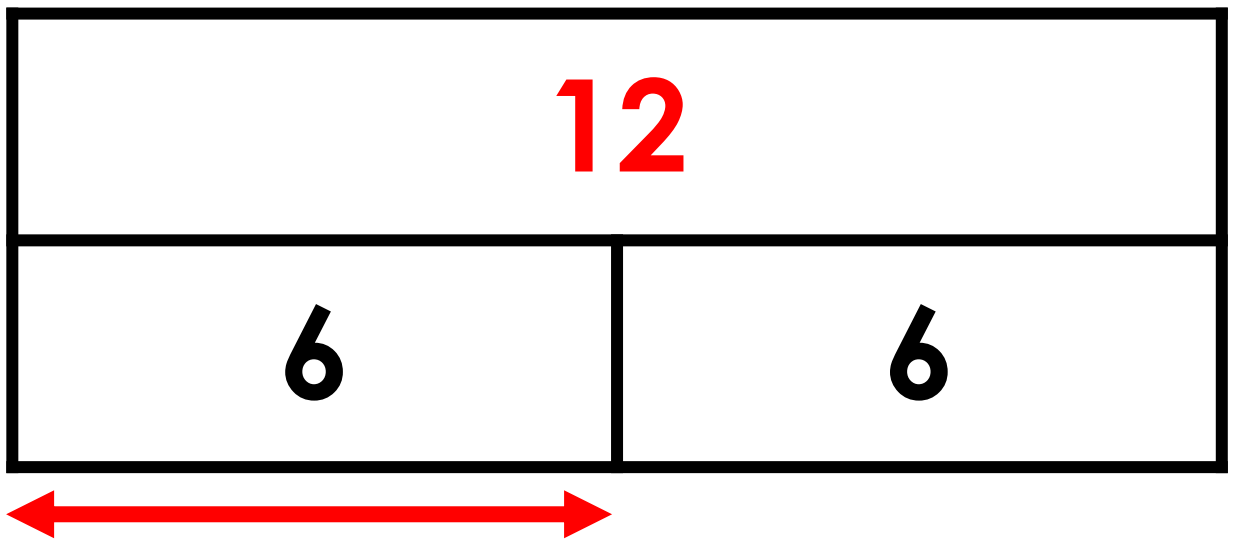
$$\frac{1}{\square} \text{ of } \square = 6$$



Task 39: Fraction of a number

Example answer 1:

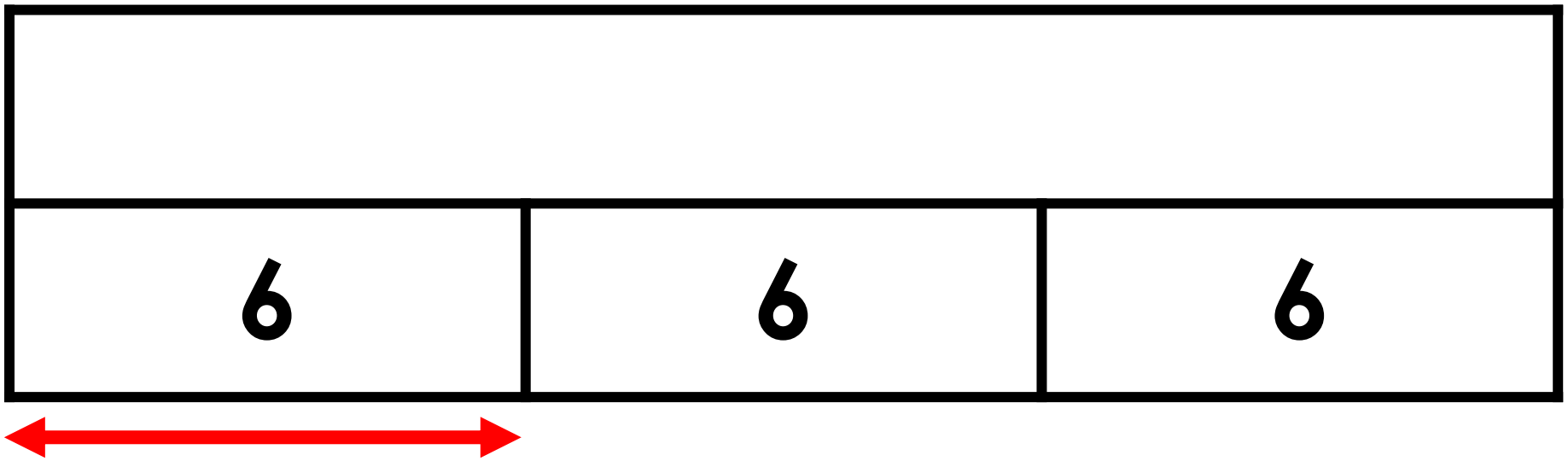
$$\frac{1}{\boxed{2}} \text{ of } \boxed{12} = 6$$



Task 39: Fraction of a number

Example answer 2:

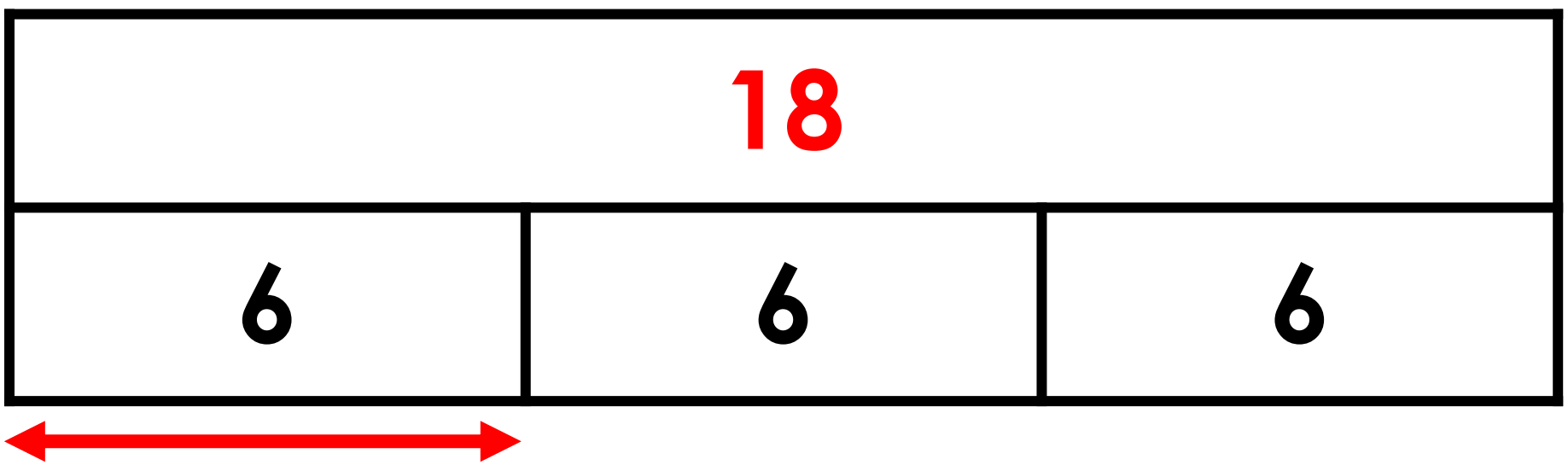
$$\frac{1}{\square} \text{ of } \square = 6$$



Task 39: Fraction of a number

Example answer 2:

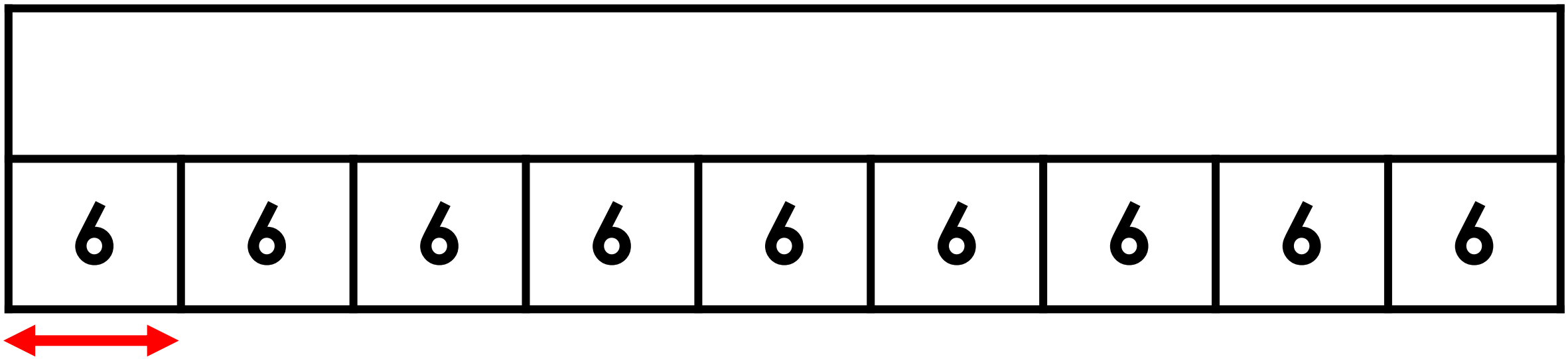
$$\frac{1}{\boxed{3}} \text{ of } \boxed{18} = 6$$



Task 39: Fraction of a number

Example answer 3:

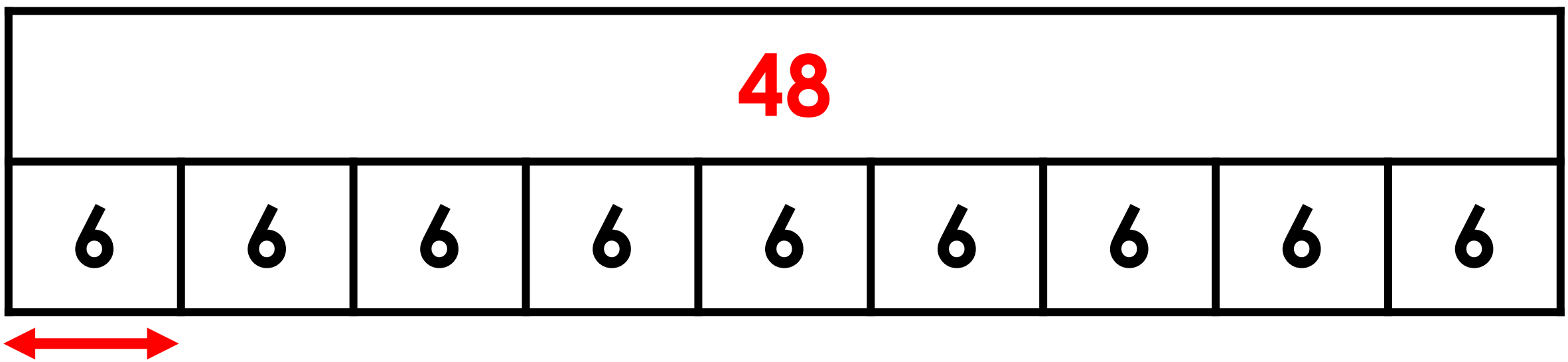
$$\frac{1}{\square} \text{ of } \square = 6$$



Task 39: Fraction of a number

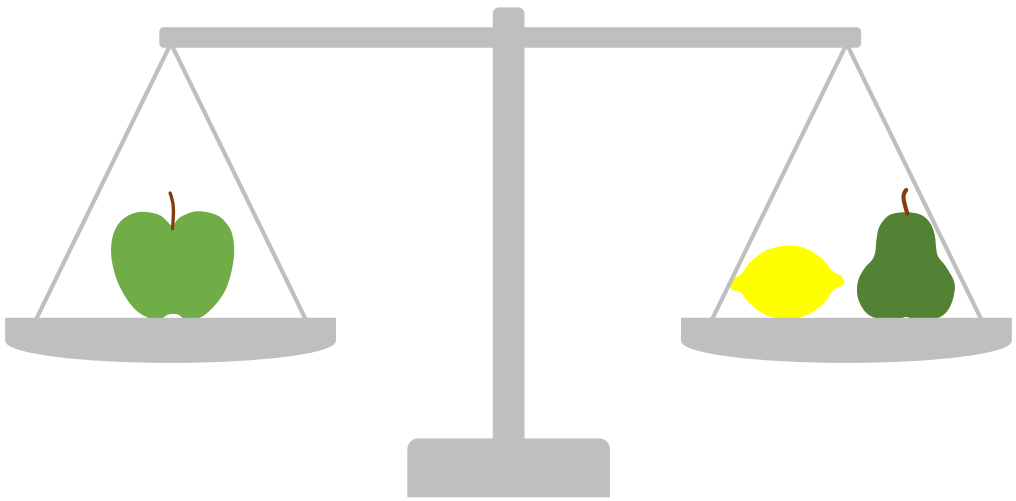
Example answer 3:

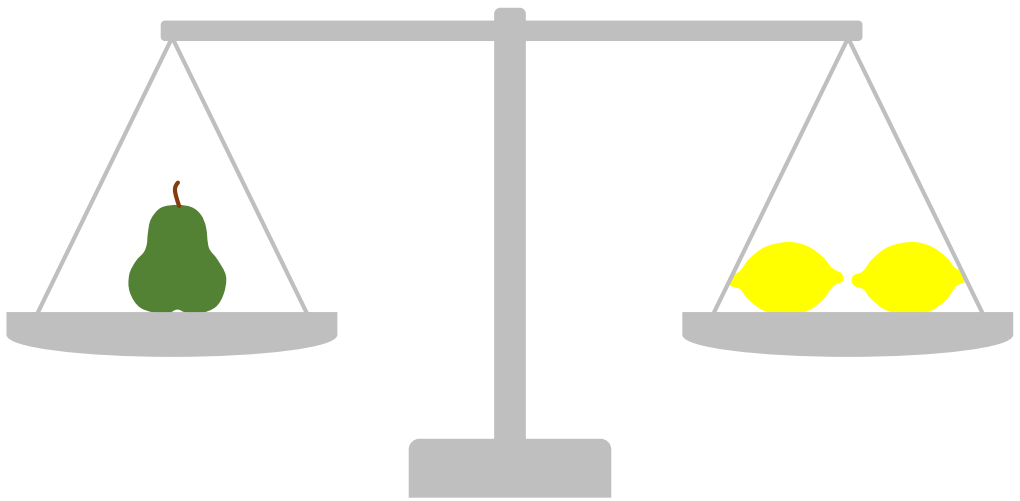
$$\frac{1}{\boxed{9}} \text{ of } \boxed{54} = 6$$



Task 40: Balancing scales

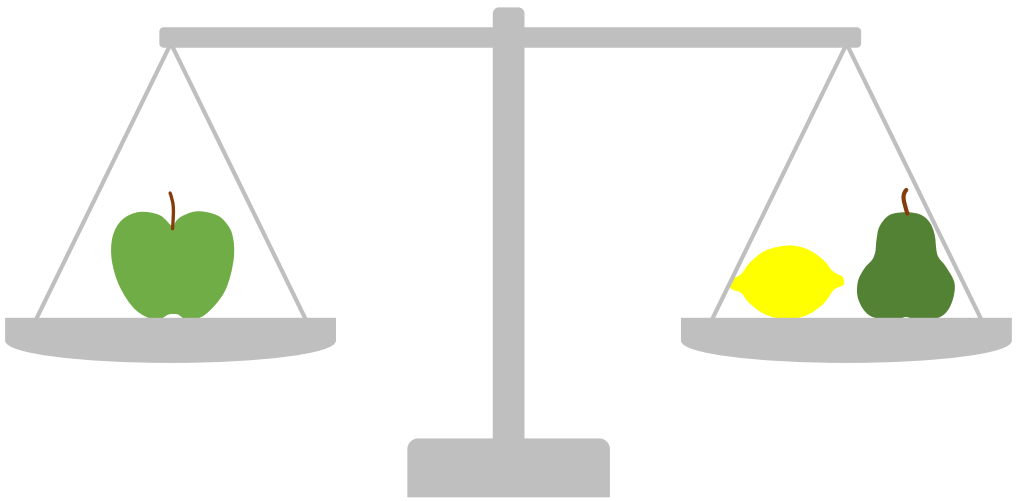
Part 1

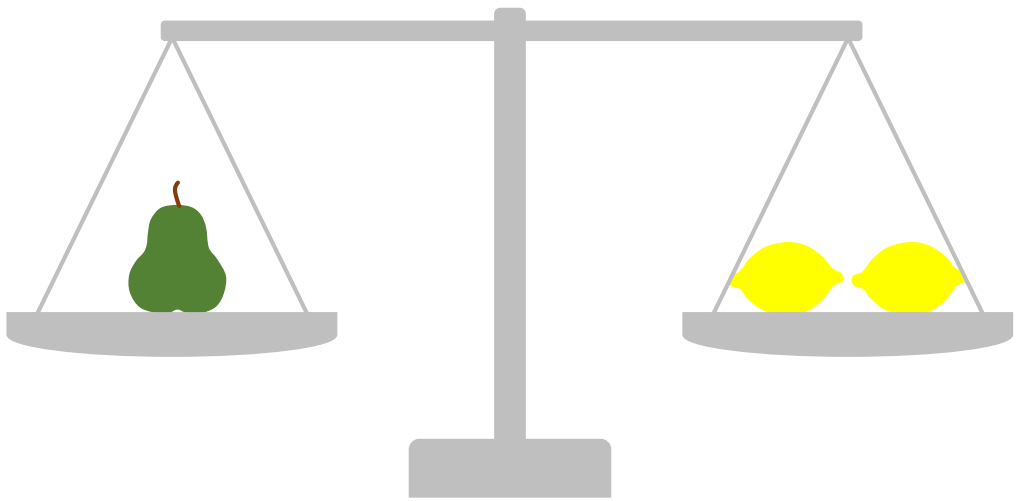




Task 40: Balancing scales

Part 1



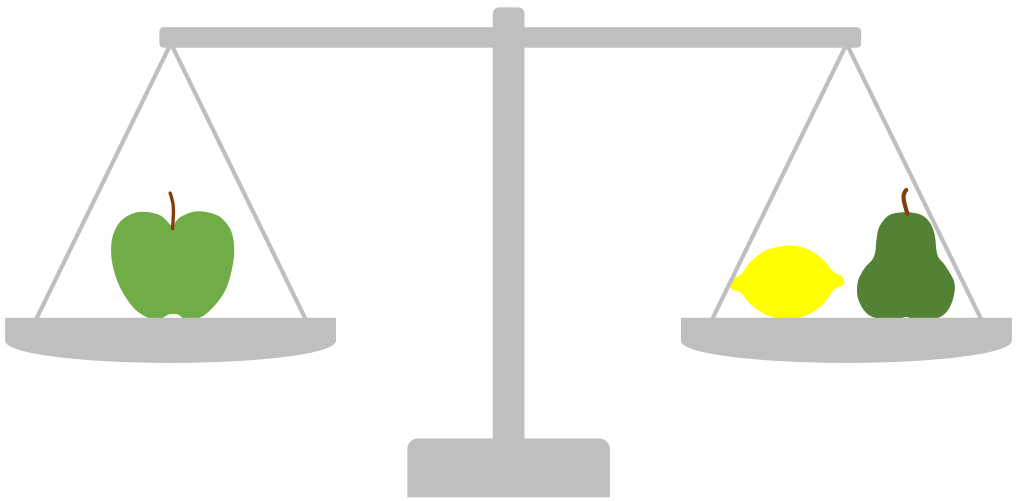


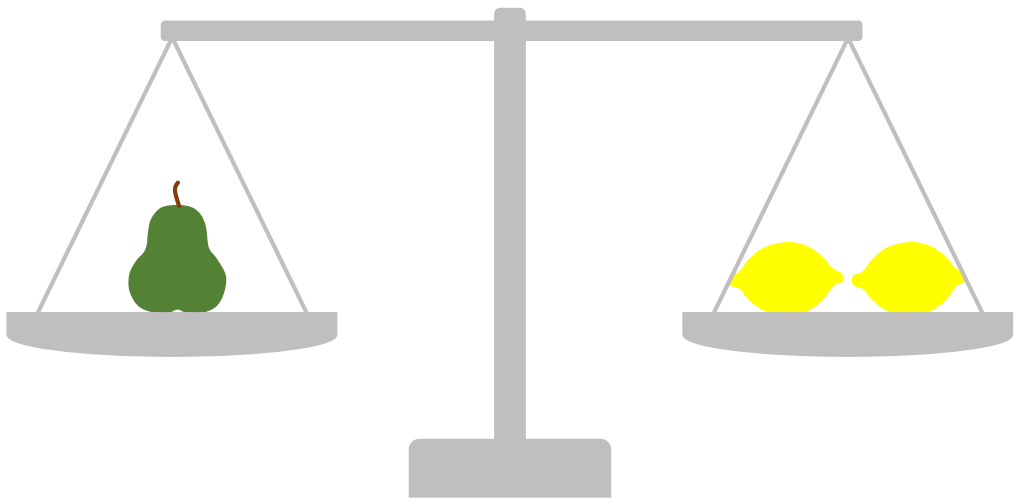
Pear	
Lemon	Lemon

A pear is heavier than a lemon.

Task 40: Balancing scales

Part 1





Apple	
Lemon	Pear

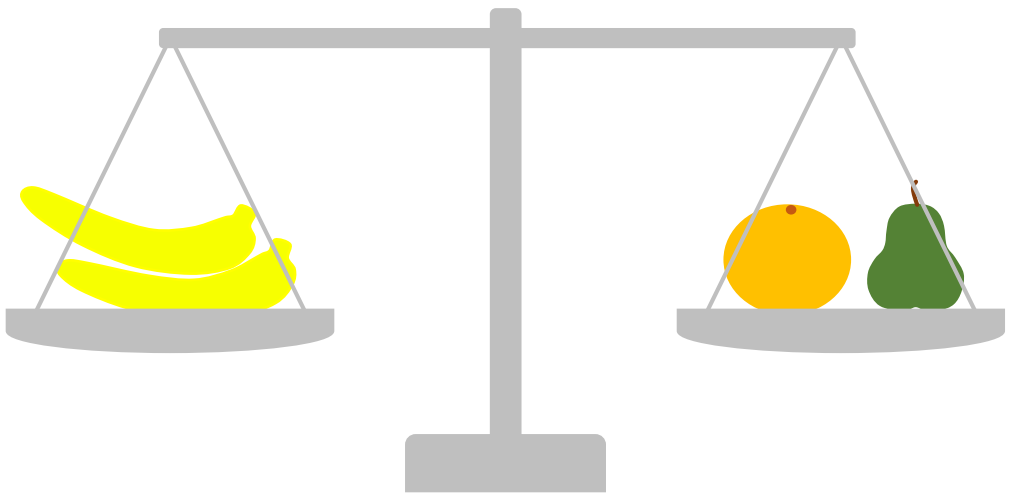
Pear	
Lemon	Lemon

A pear is heavier than a lemon.

An apple is heavier than a pear.

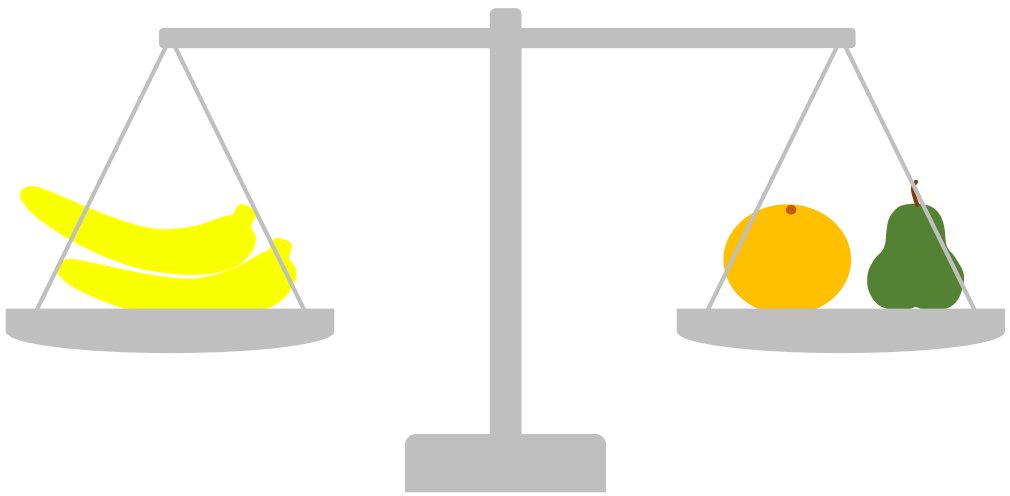
Task 40: Balancing scales

Part 2



Task 40: Balancing scales

Part 2

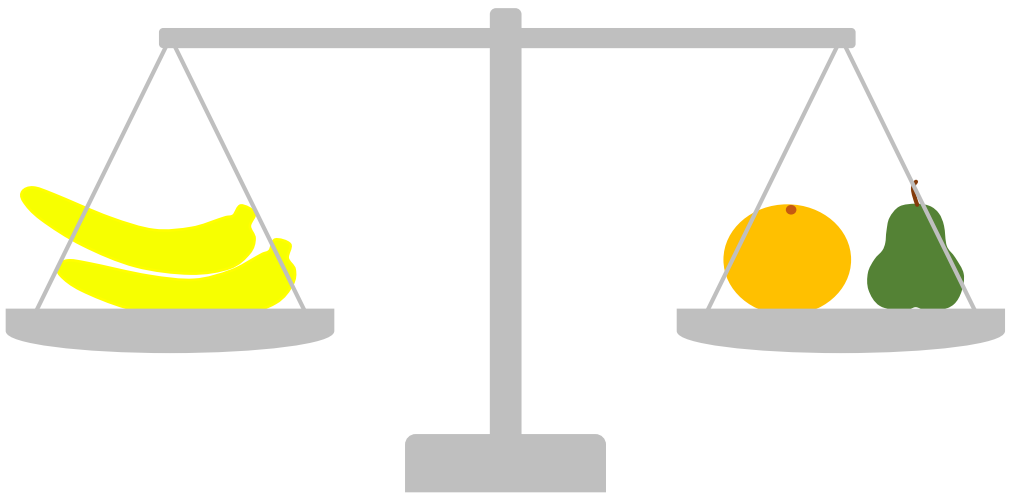


Orange	
Pear	Pear

An orange is heavier than a pear.

Task 40: Balancing scales

Part 2



Orange	
Pear	Pear

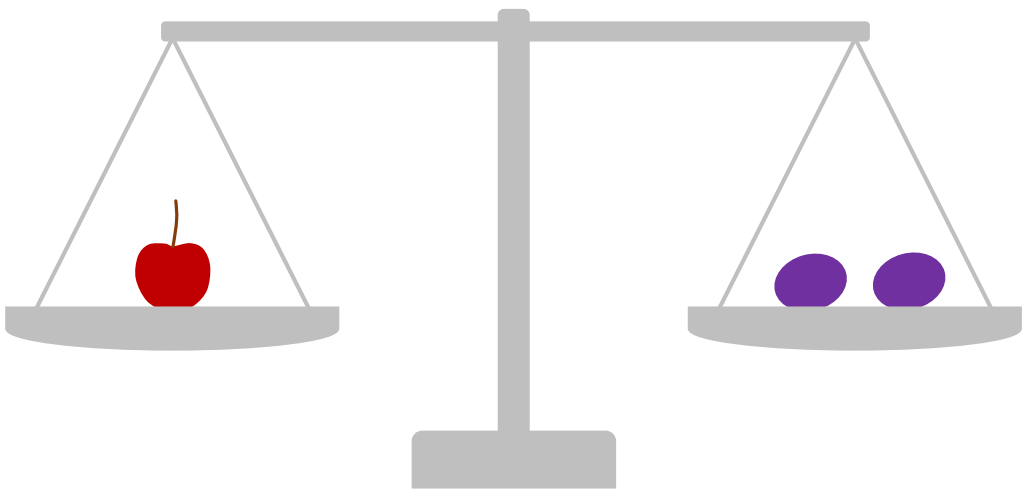
Banana	Banana
Orange	Pear

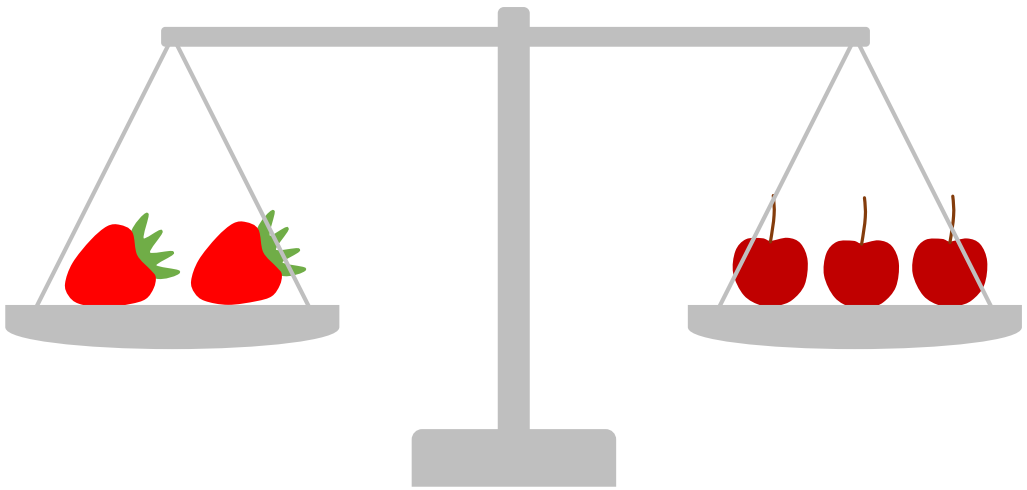
An orange is heavier than a pear.

A banana is lighter than an orange but heavier than a pear.

Task 40: Balancing scales

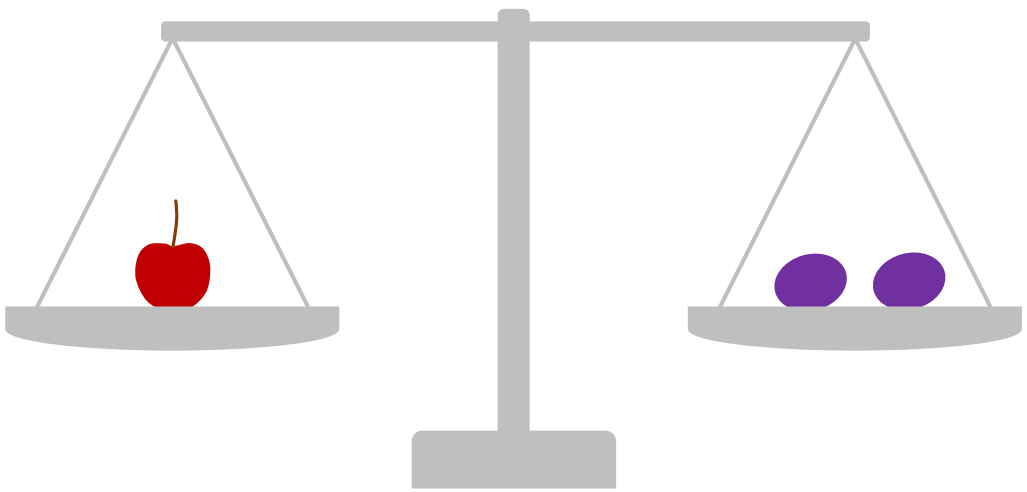
Part 3

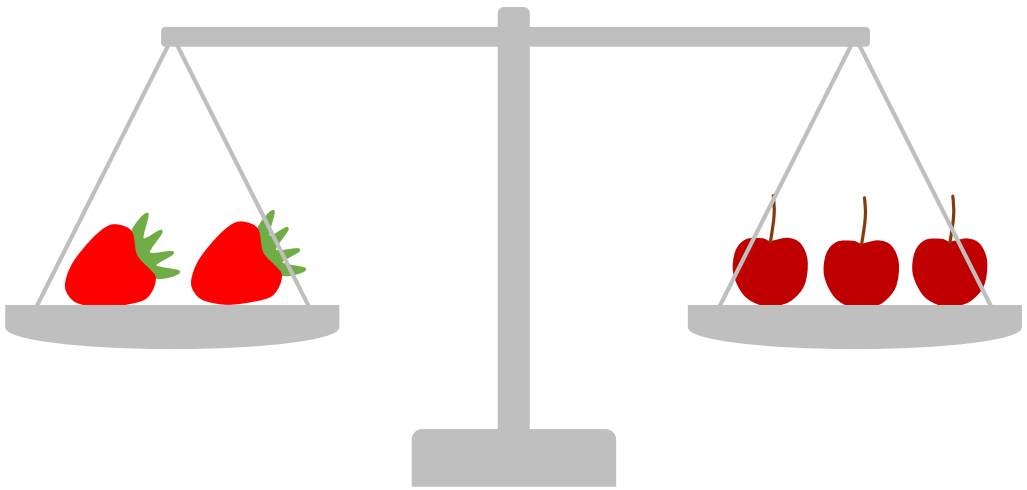




Task 40: Balancing scales

Part 3



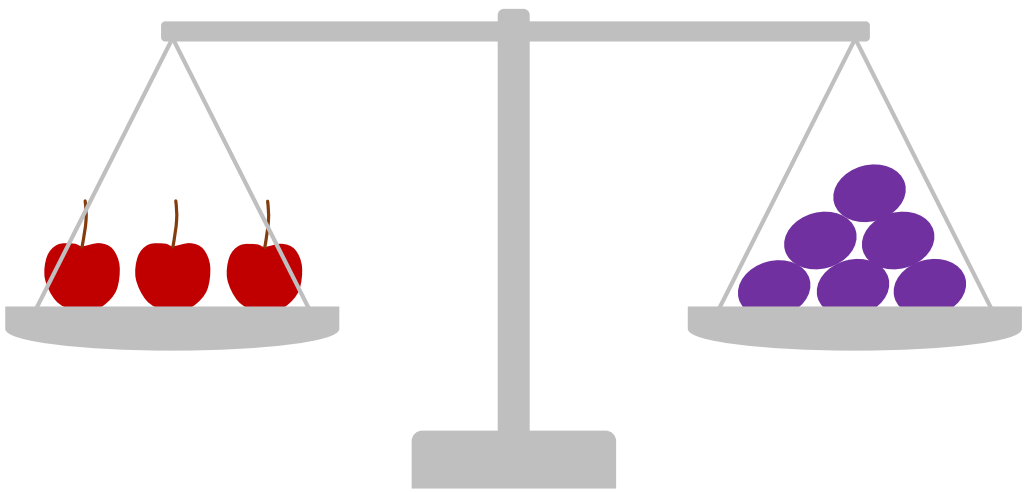


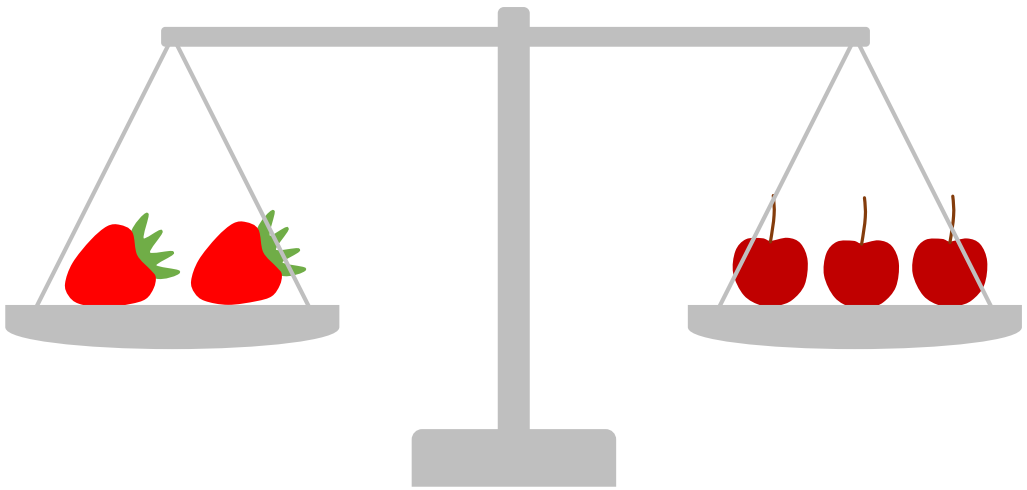
Cherry	
Grape	Grape

1 cherry = 2 grapes

Task 40: Balancing scales

Part 3





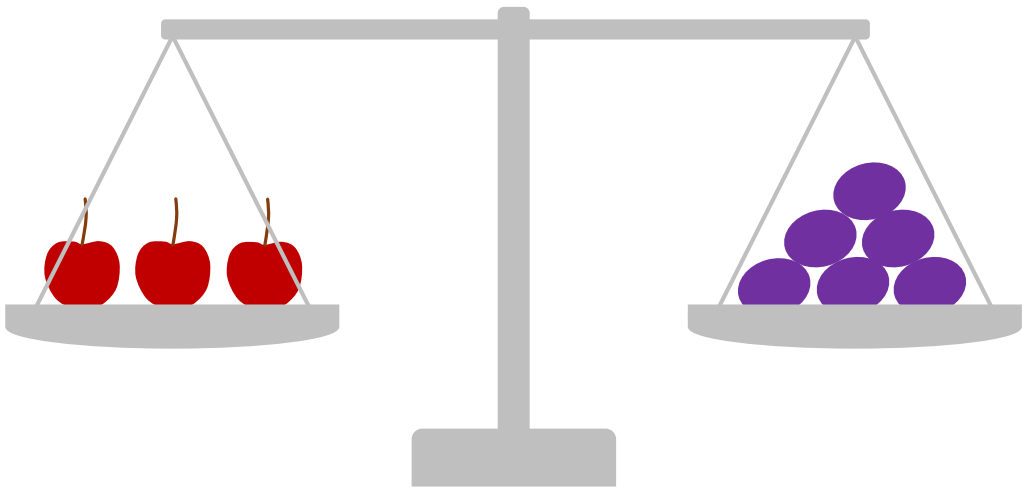
Cherry	
Grape	Grape

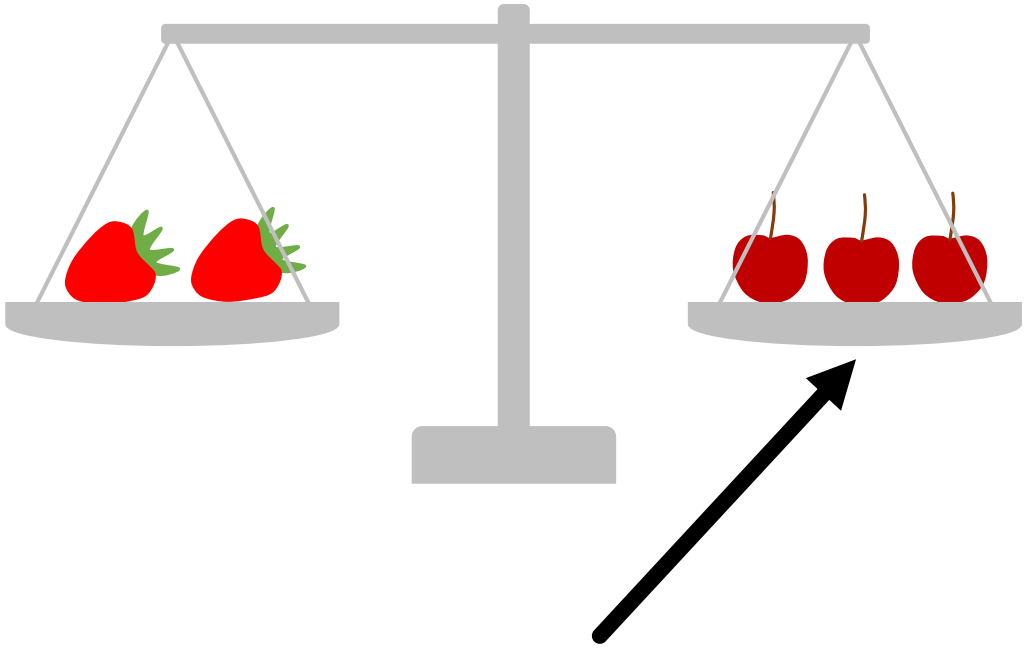
1 cherry = 2 grapes

3 cherries = 6 grapes

Task 40: Balancing scales

Part 3





Cherry	
Grape	Grape

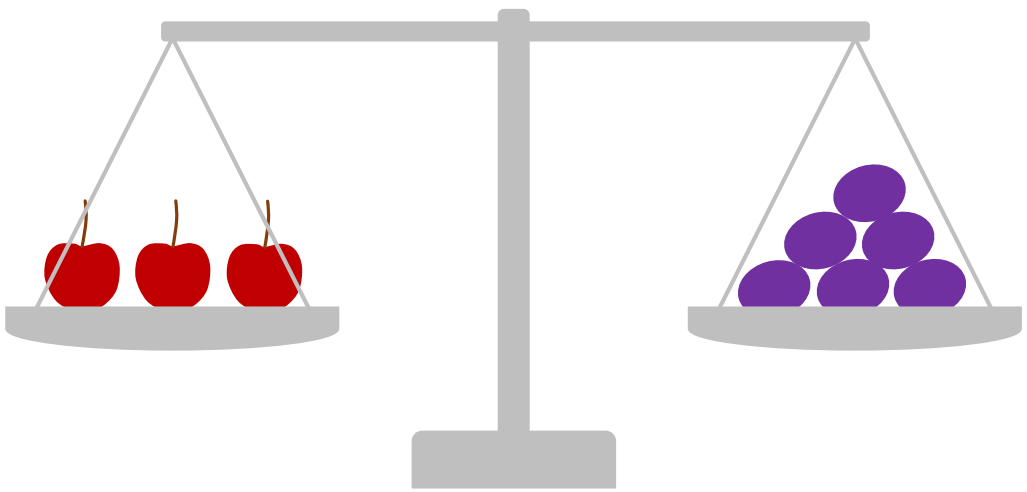
This is the same weight as 6 grapes

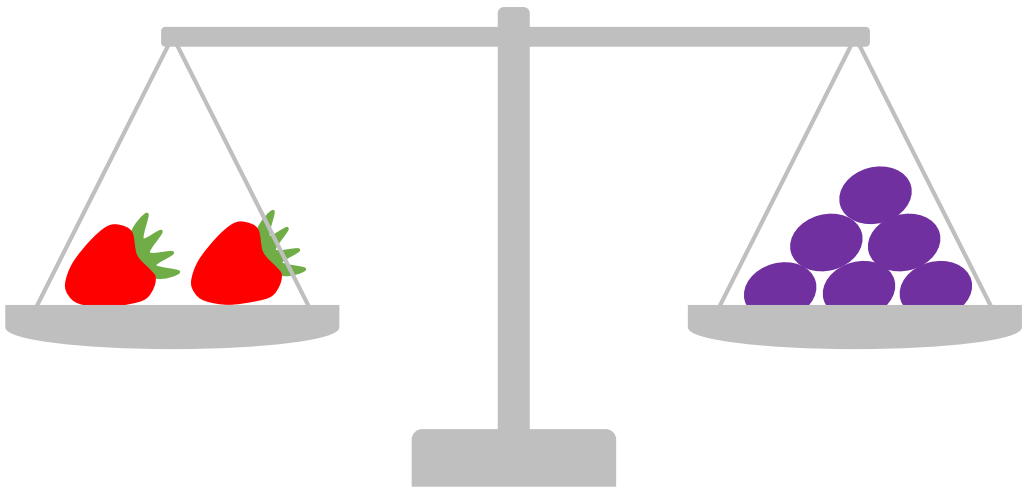
1 cherry = 2 grapes

3 cherries = 6 grapes

Task 40: Balancing scales

Part 3





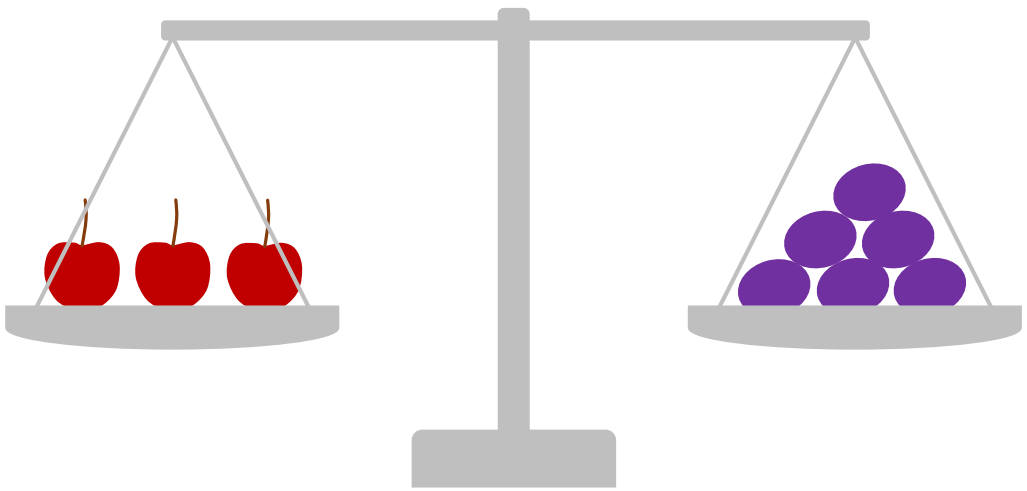
Cherry	
Grape	Grape

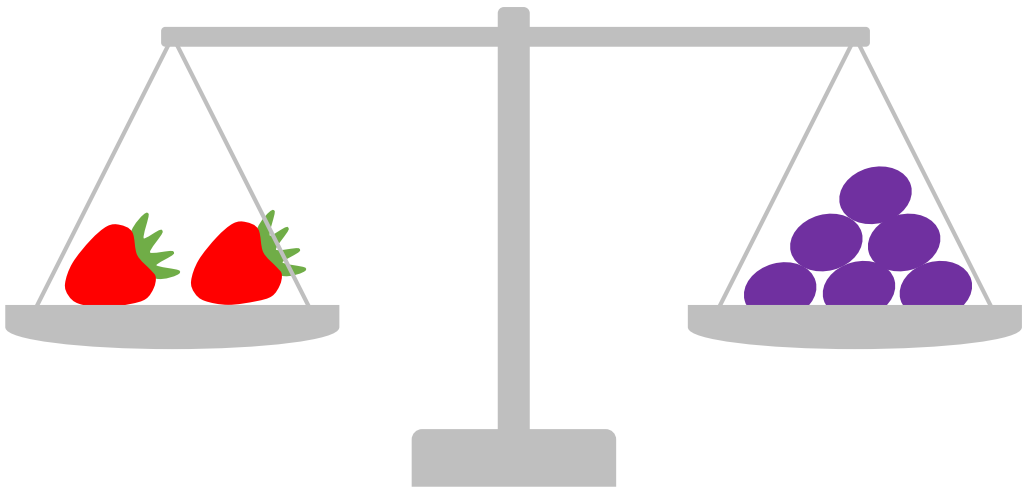
1 cherry = 2 grapes

3 cherries = 6 grapes

Task 40: Balancing scales

Part 3





Cherry	
Grape	Grape

Strawberry			Strawberry		
G	G	G	G	G	G

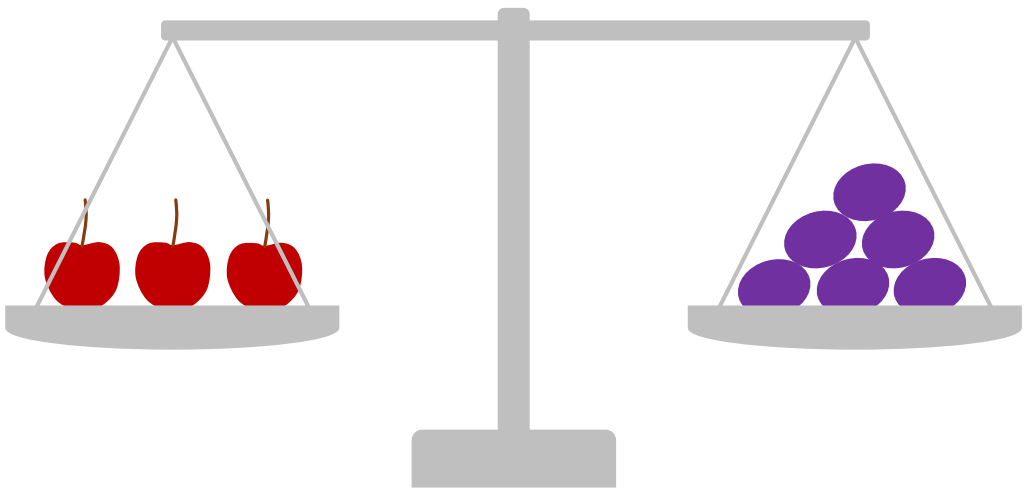
1 cherry = 2 grapes

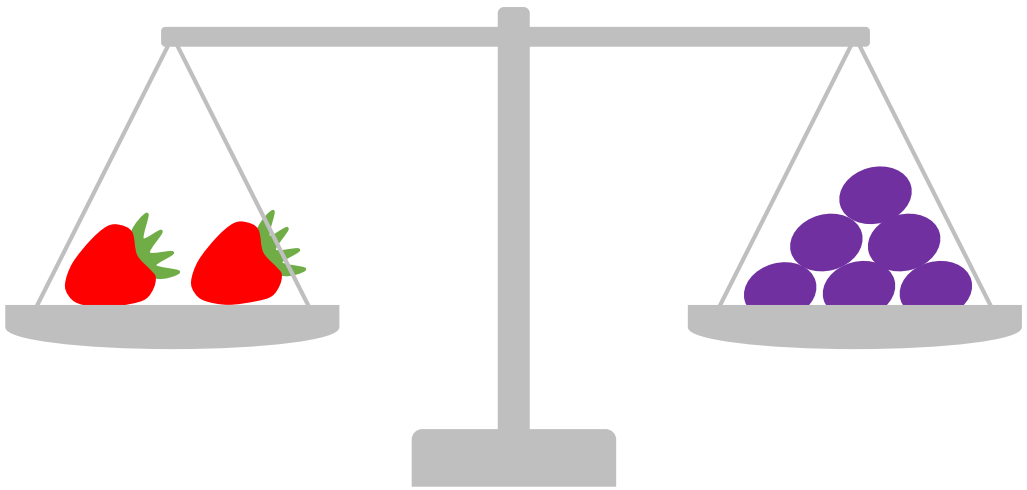
3 cherries = 6 grapes

2 strawberries = 6 grapes

Task 40: Balancing scales

Part 3





Cherry	
Grape	Grape

Strawberry			Strawberry		
G	G	G	G	G	G

1 cherry = 2 grapes

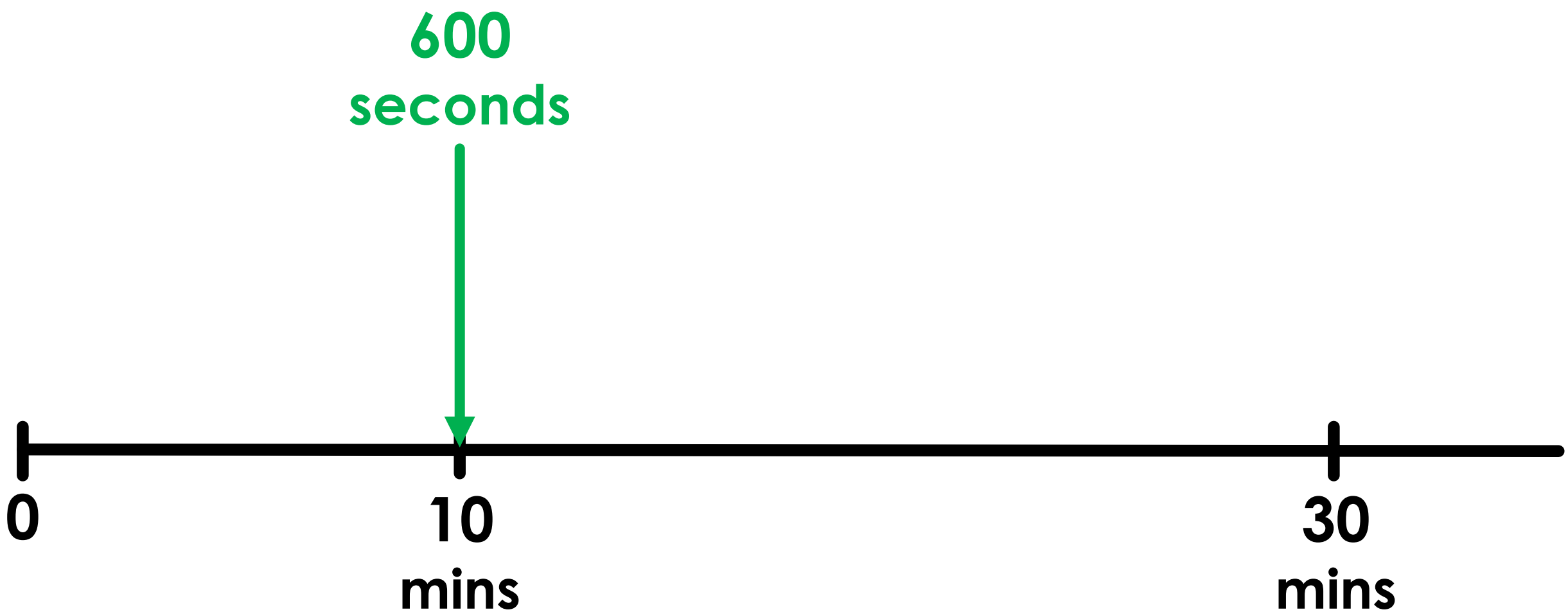
3 cherries = 6 grapes

1 strawberry = 3 grapes

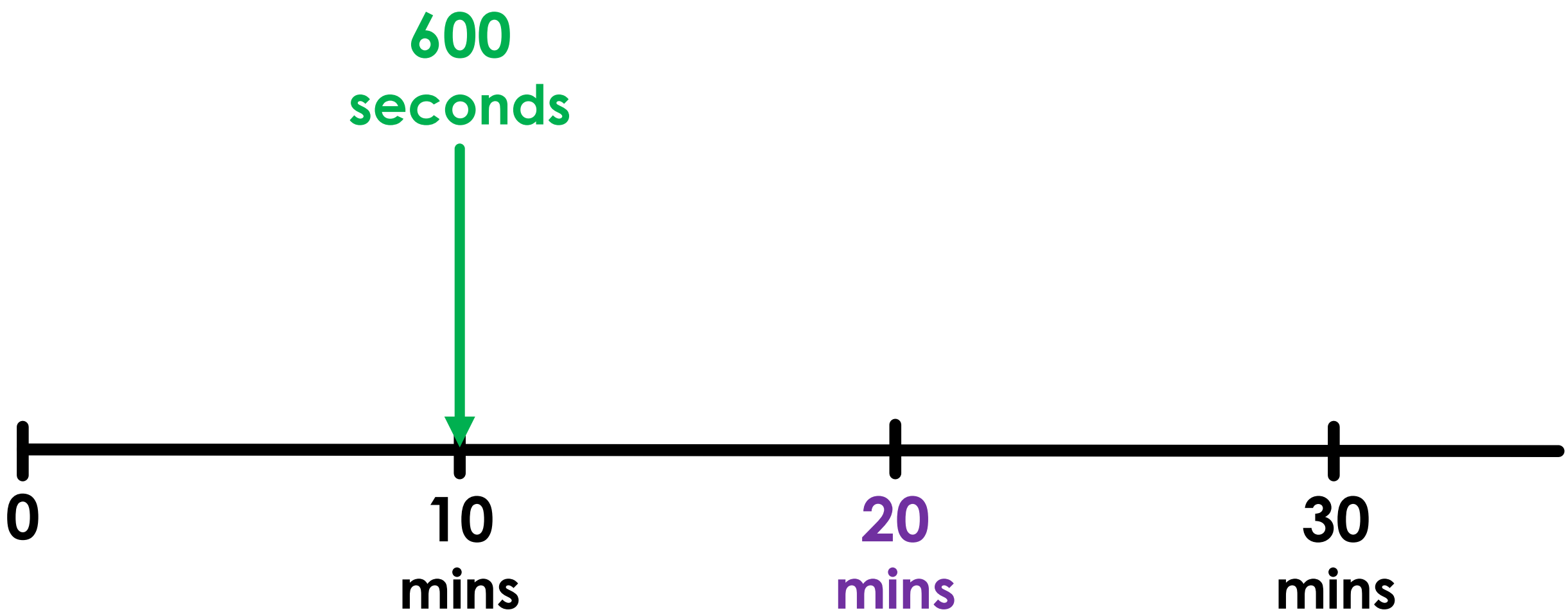
2 strawberries = 6 grapes

Task 41: Measures of time

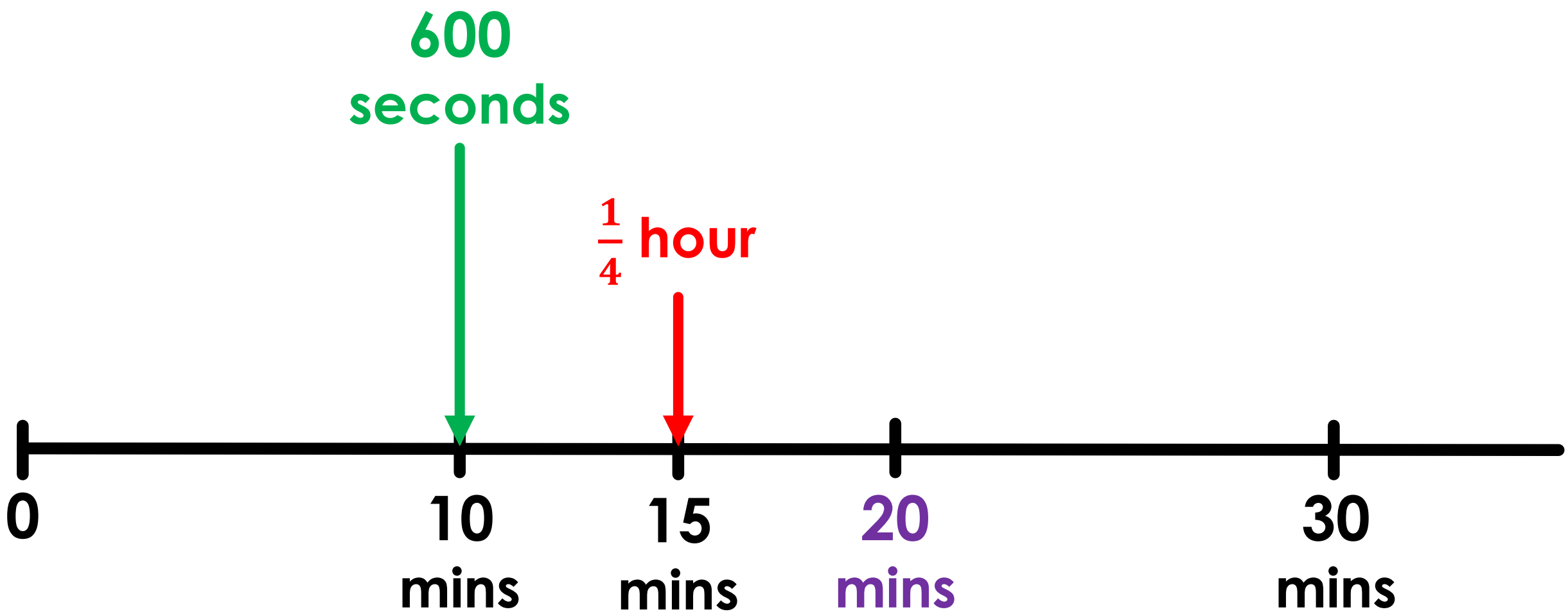
Task 41: Measures of time



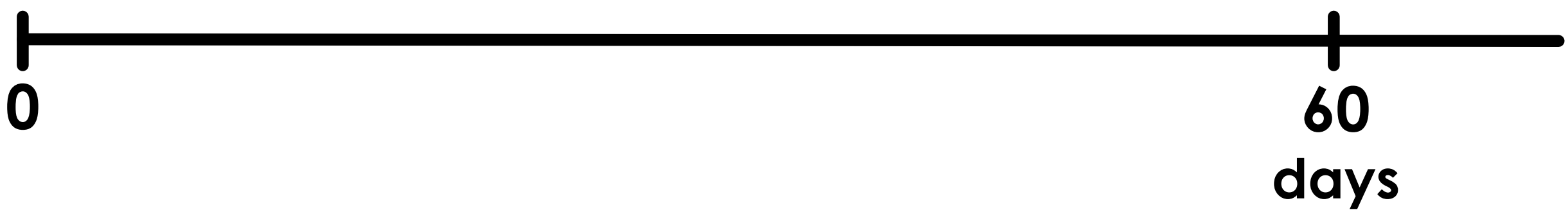
Task 41: Measures of time



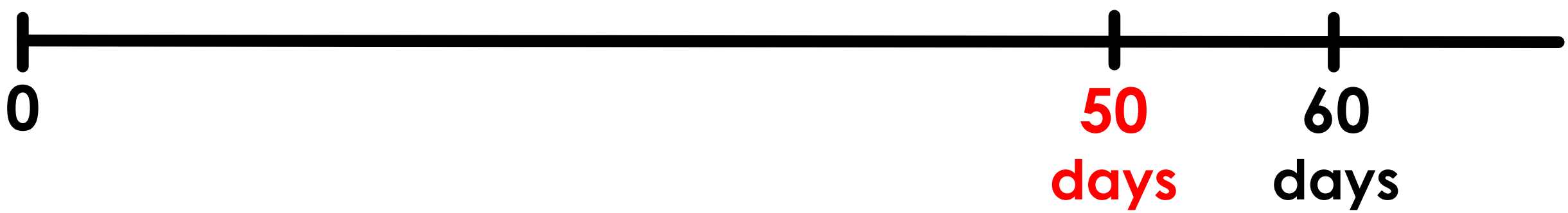
Task 41: Measures of time



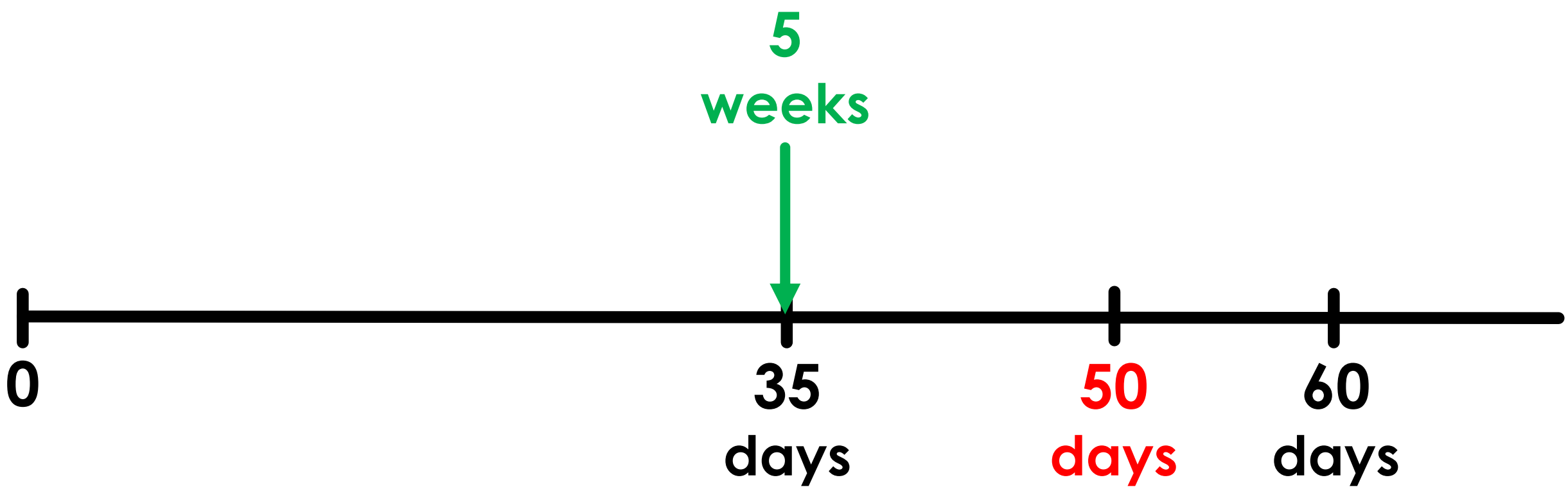
Task 41: Measures of time



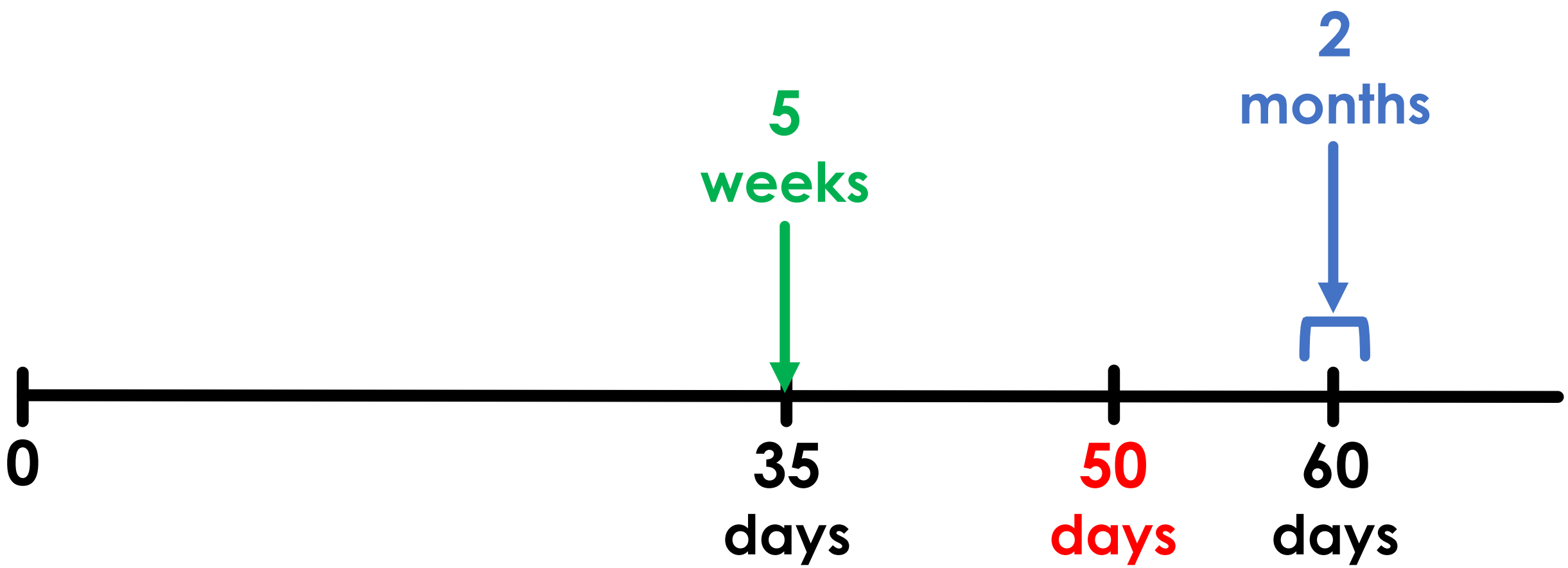
Task 41: Measures of time



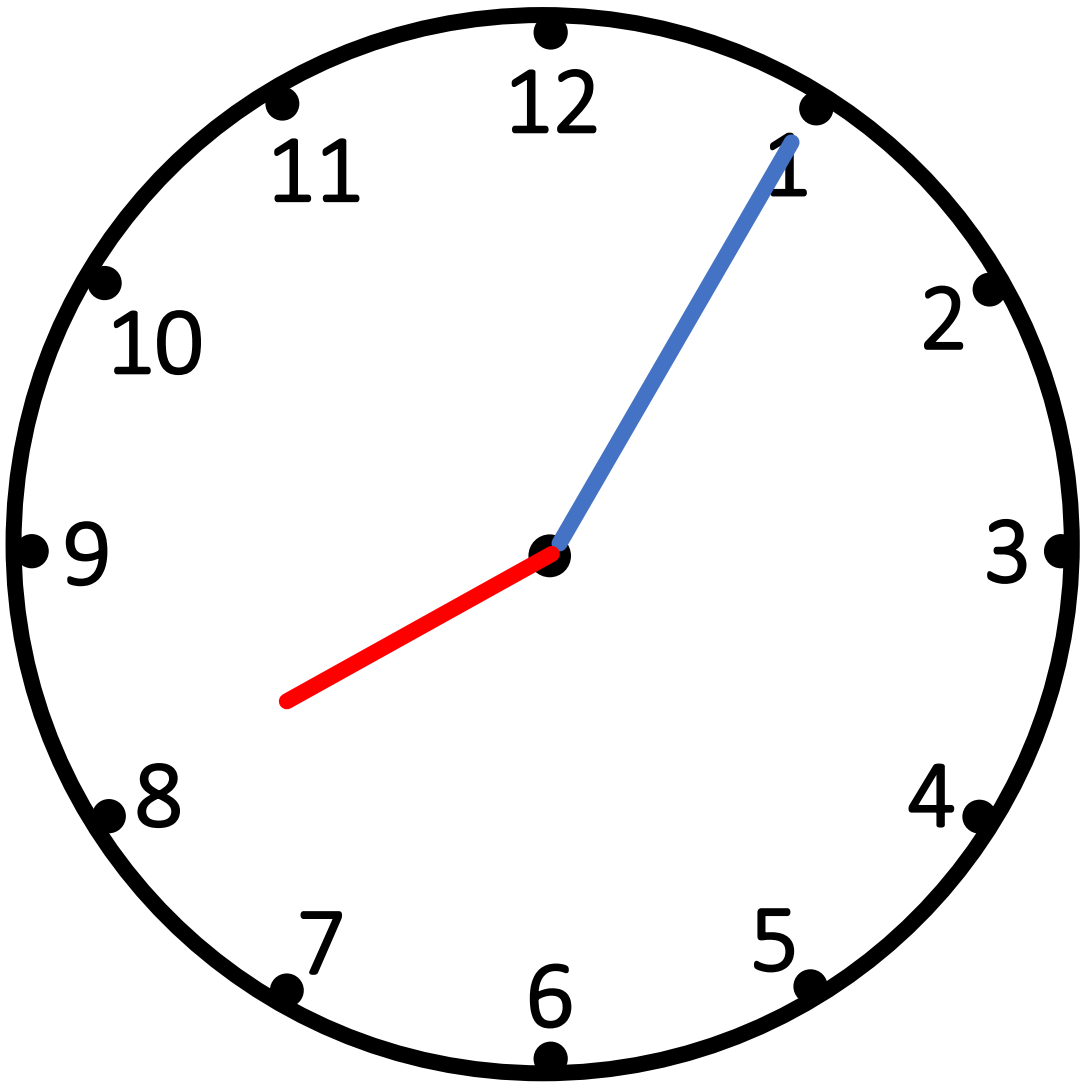
Task 41: Measures of time



Task 41: Measures of time

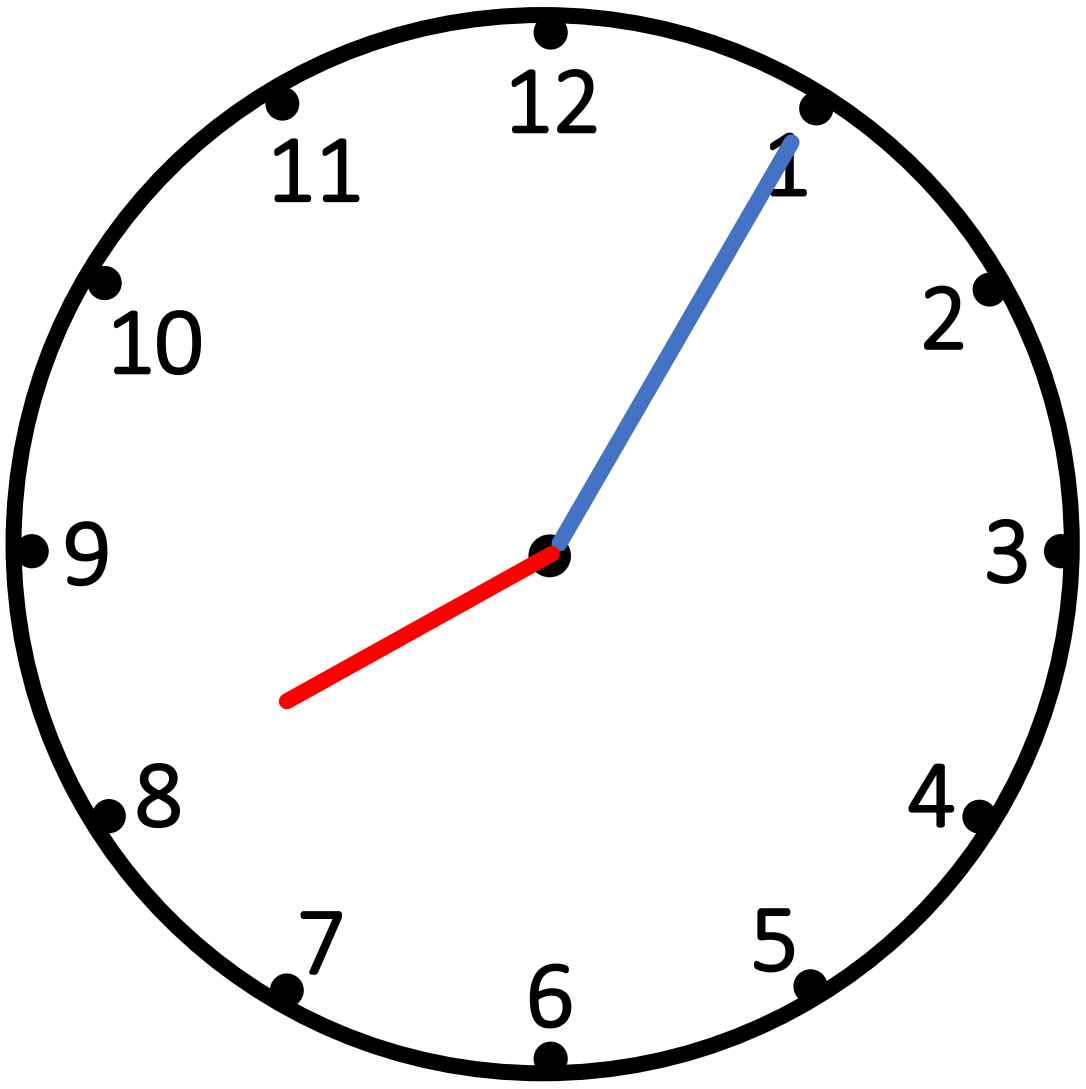


Task 42: Reading clocks

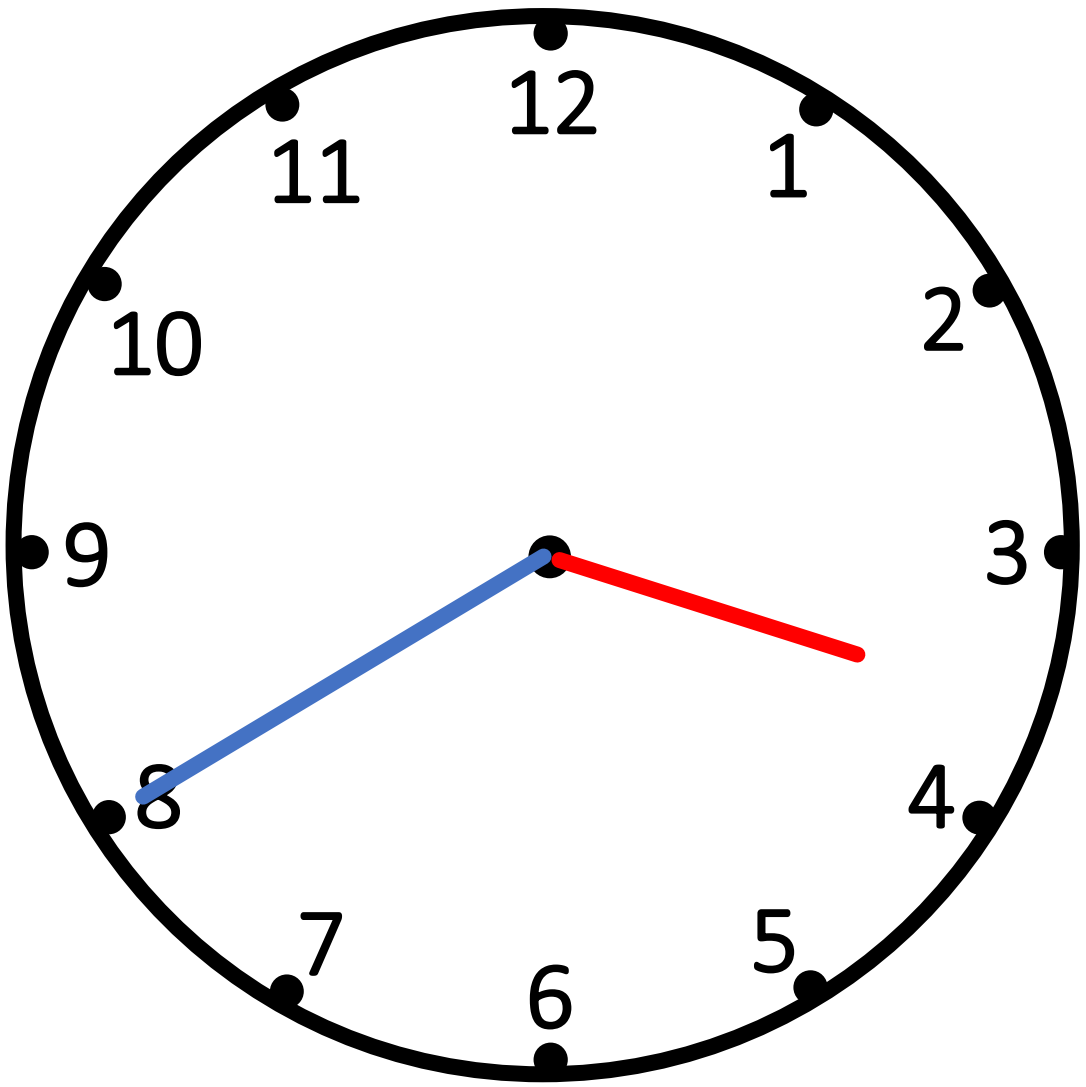


Task 42: Reading clocks

20:05

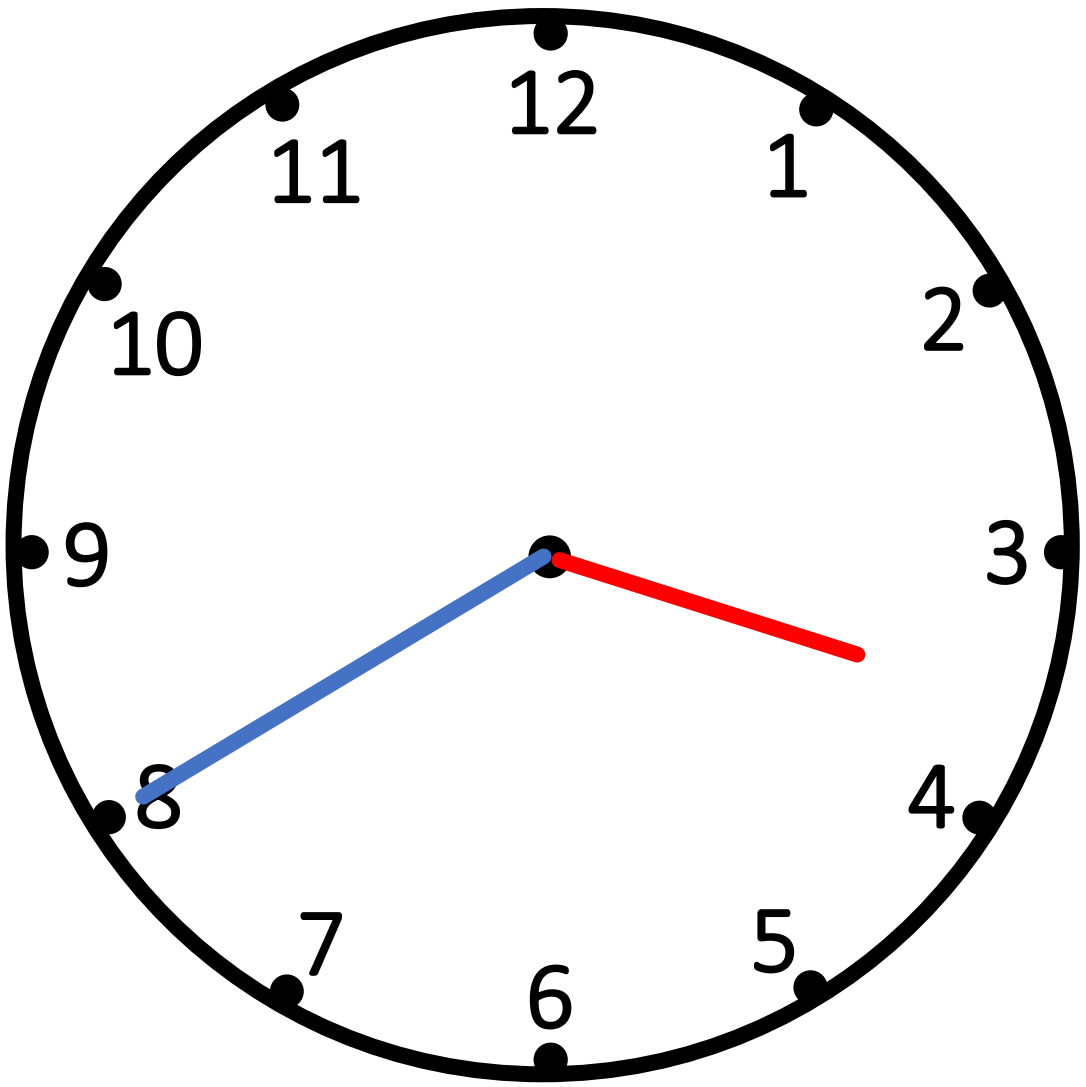


Task 42: Reading clocks

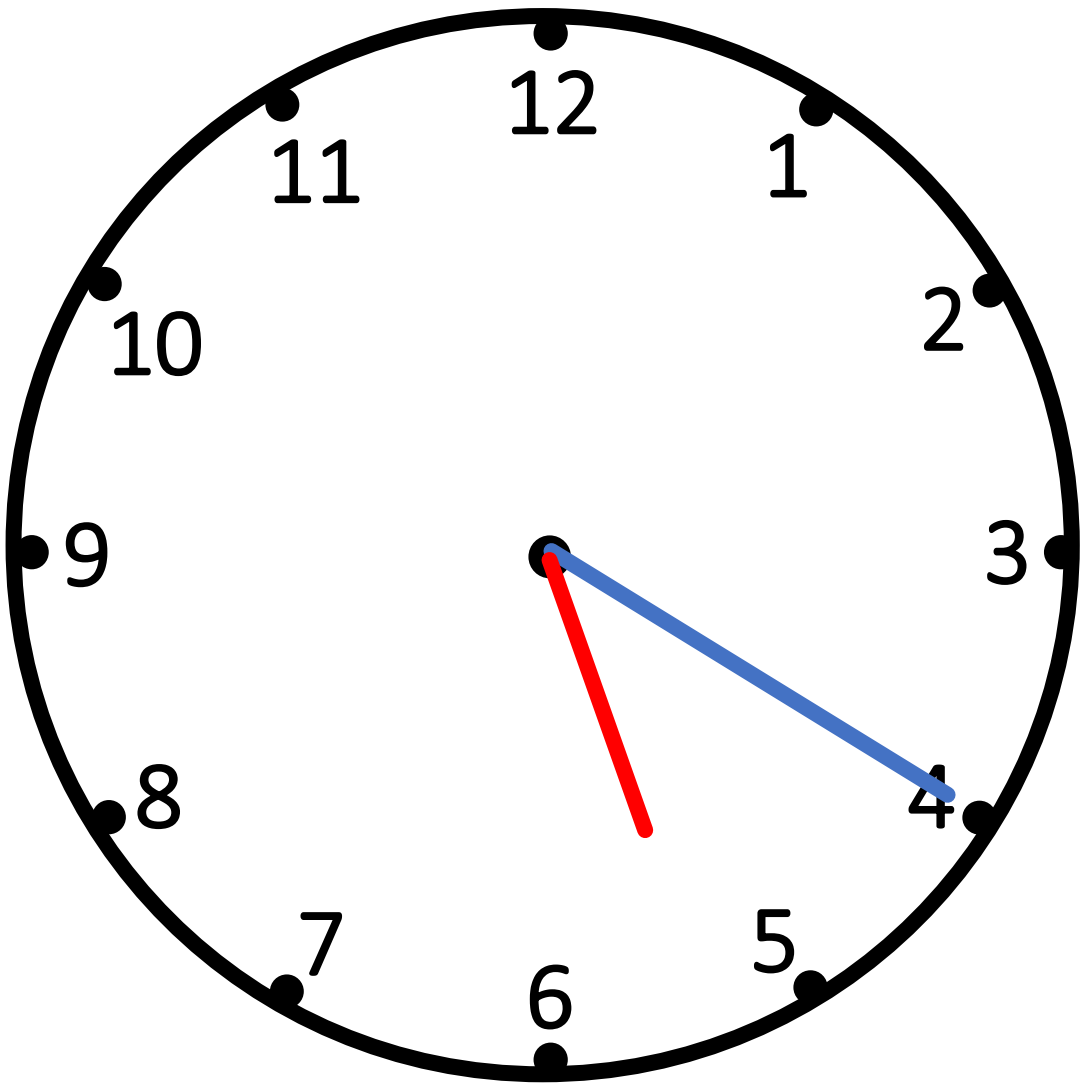


Task 42: Reading clocks

3:40

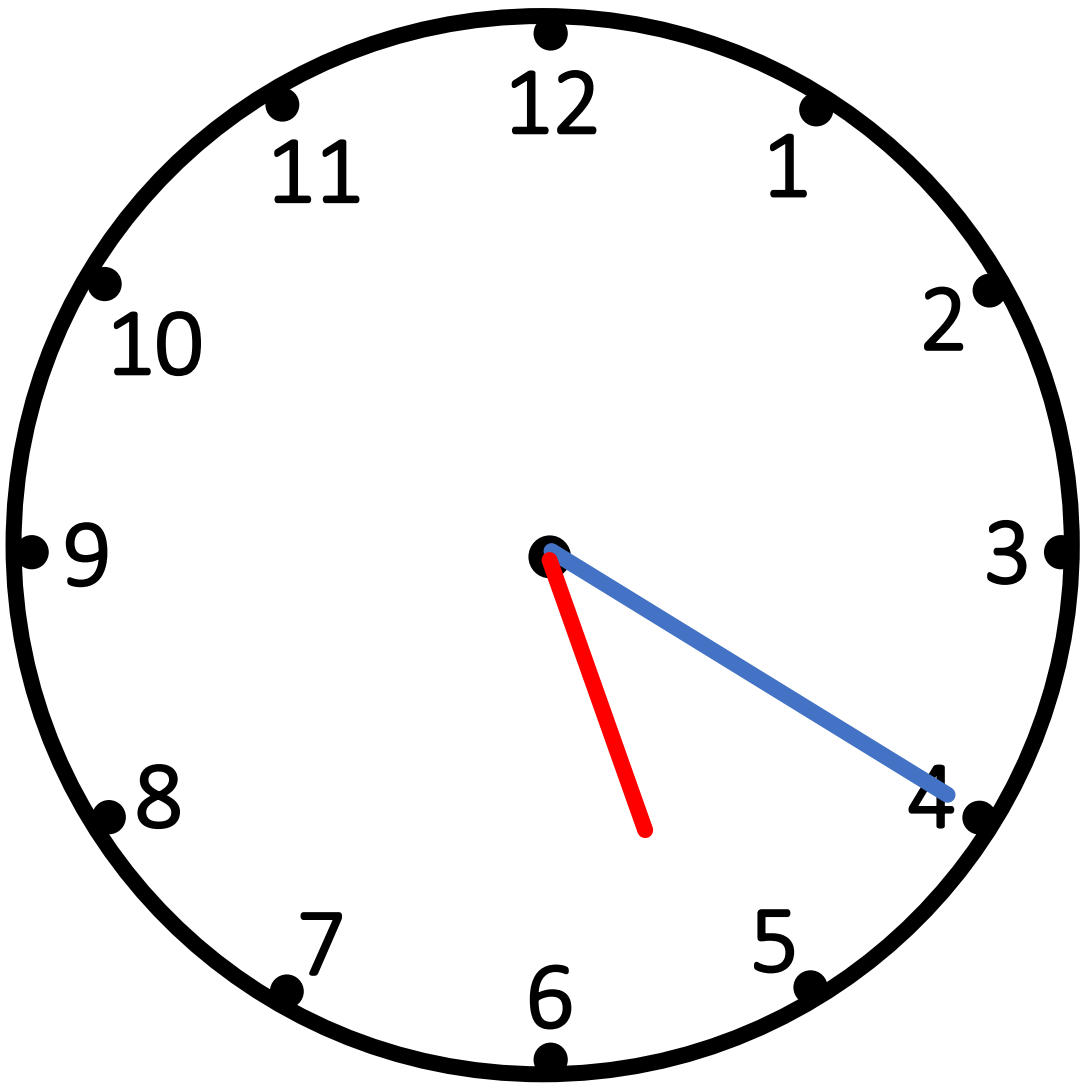


Task 42: Reading clocks

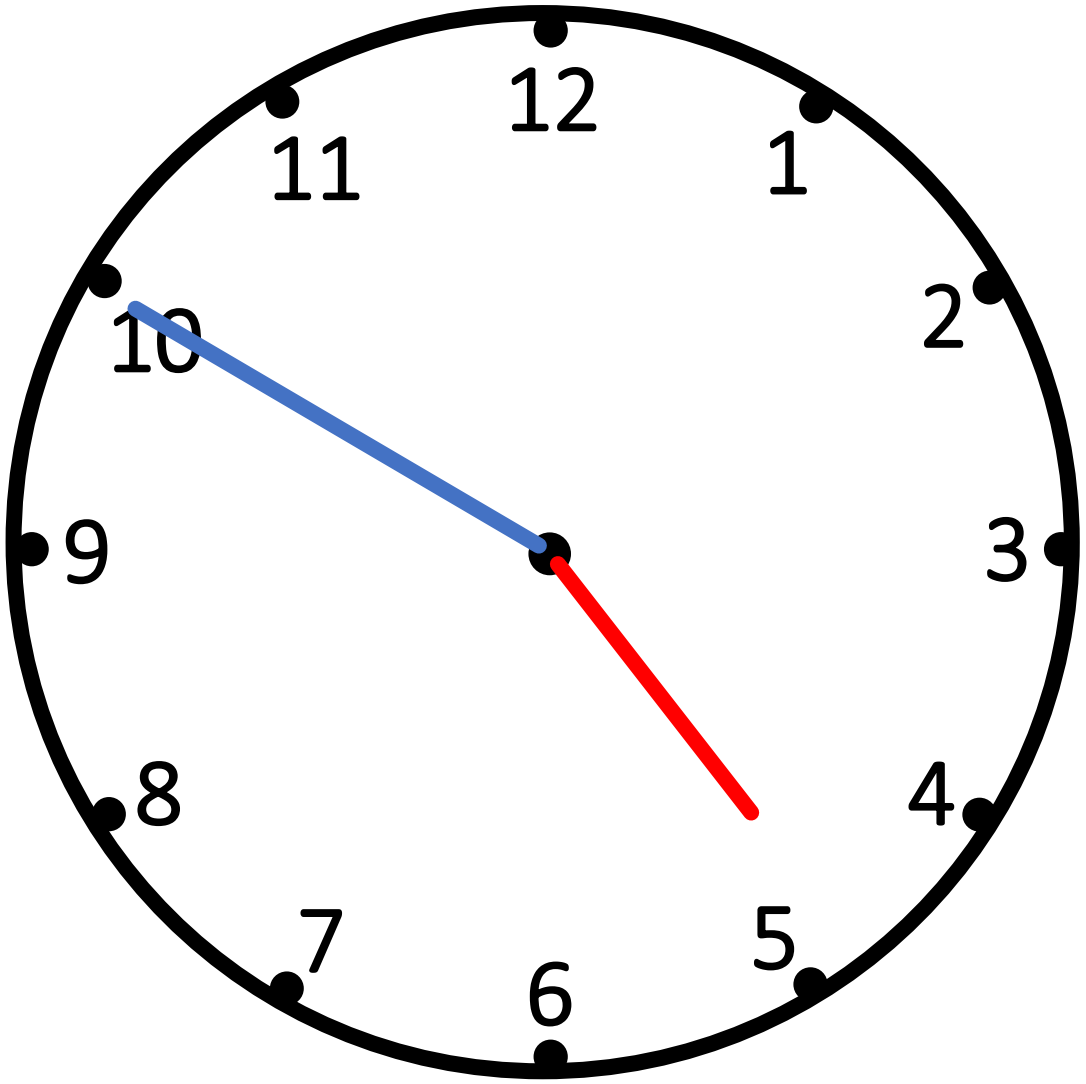


Task 42: Reading clocks

5:20

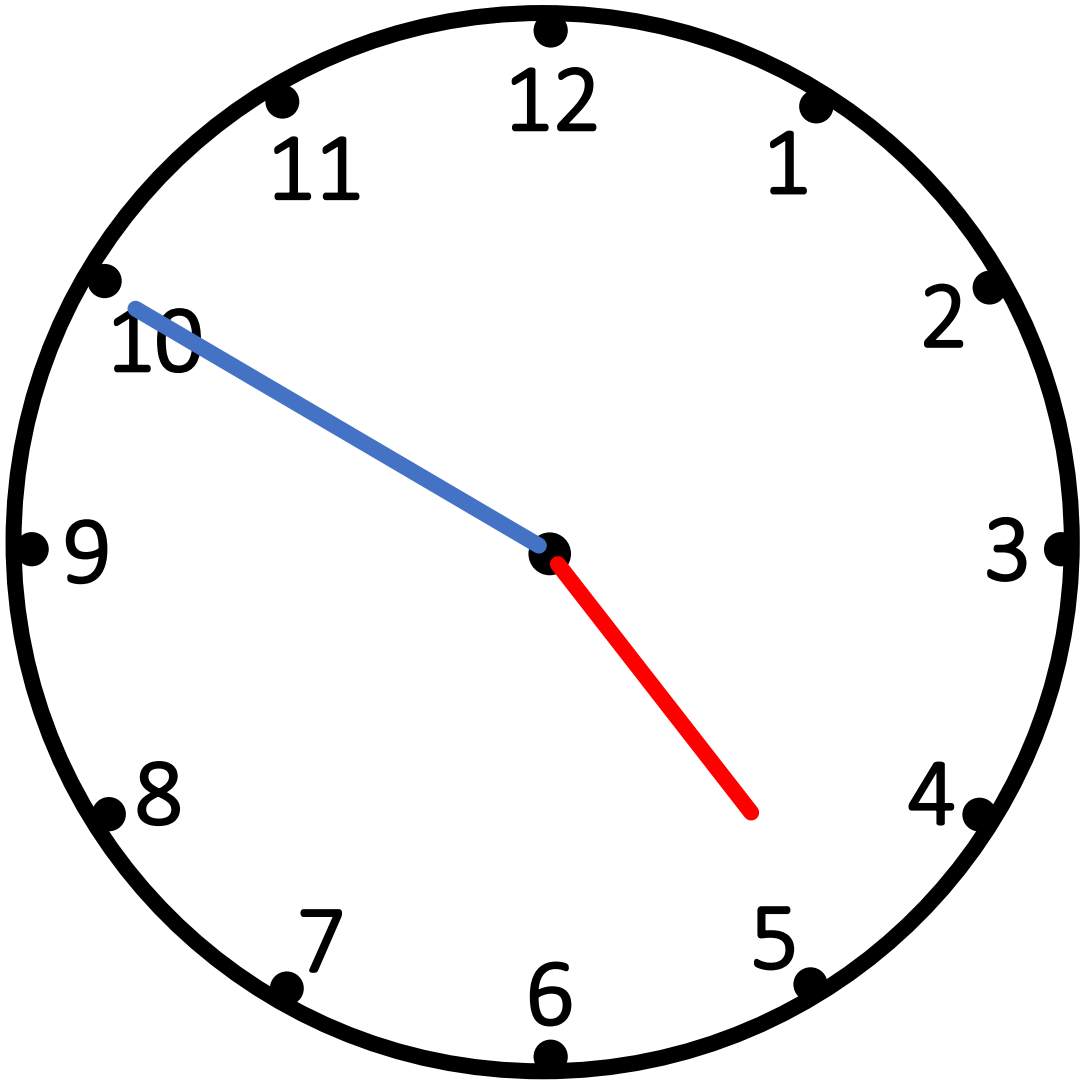


Task 42: Reading clocks



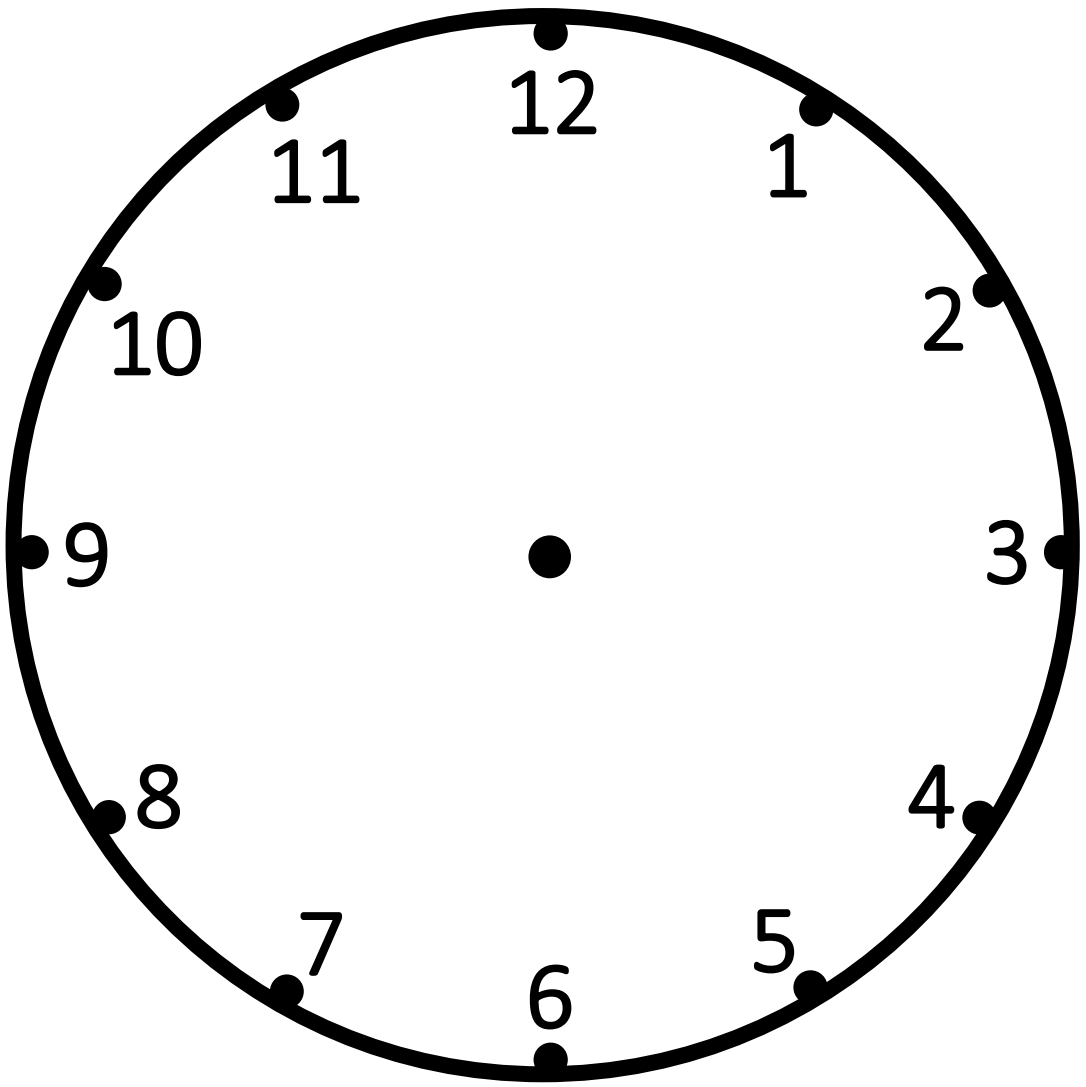
Task 42: Reading clocks

4:50



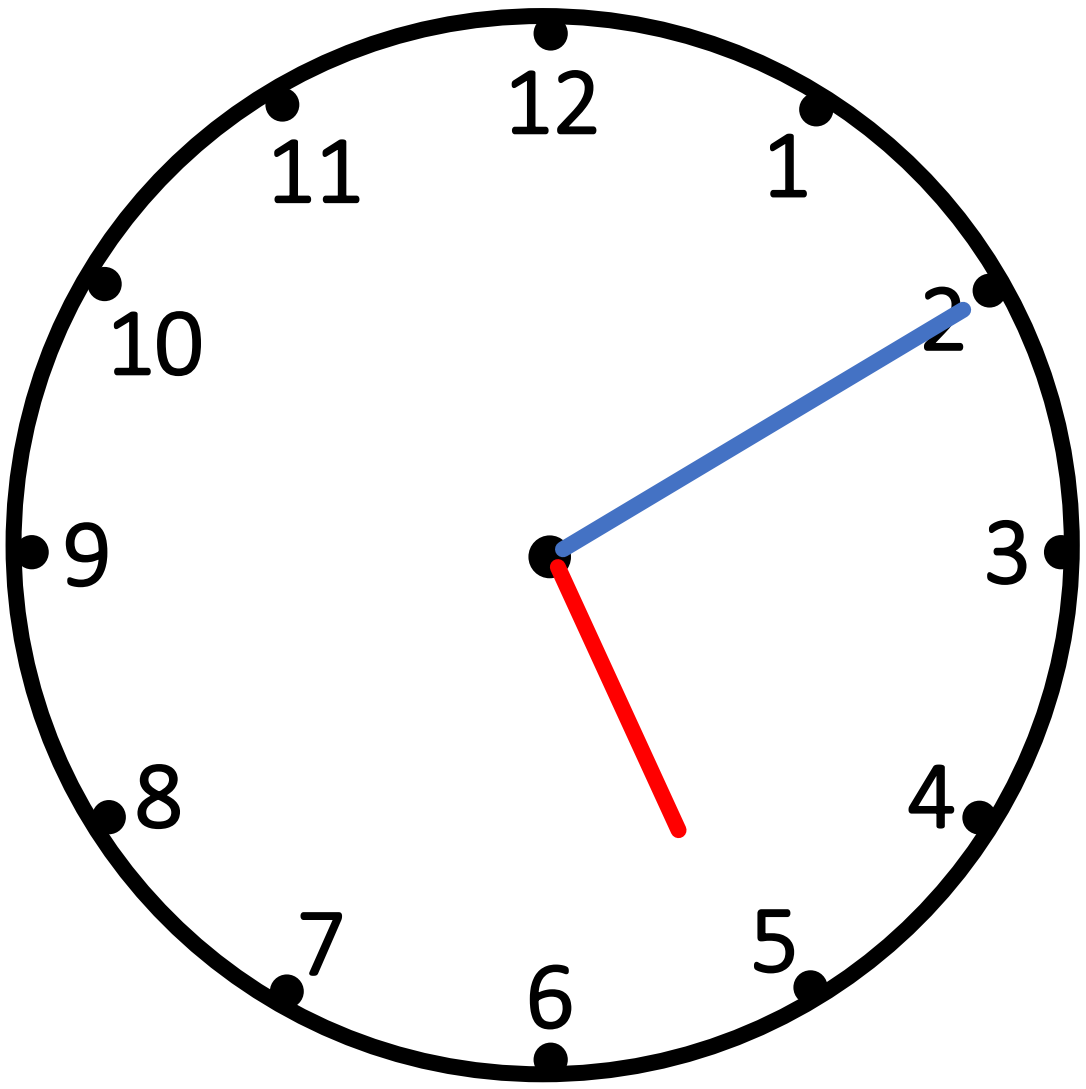
Task 42: Reading clocks

17:10



Task 42: Reading clocks

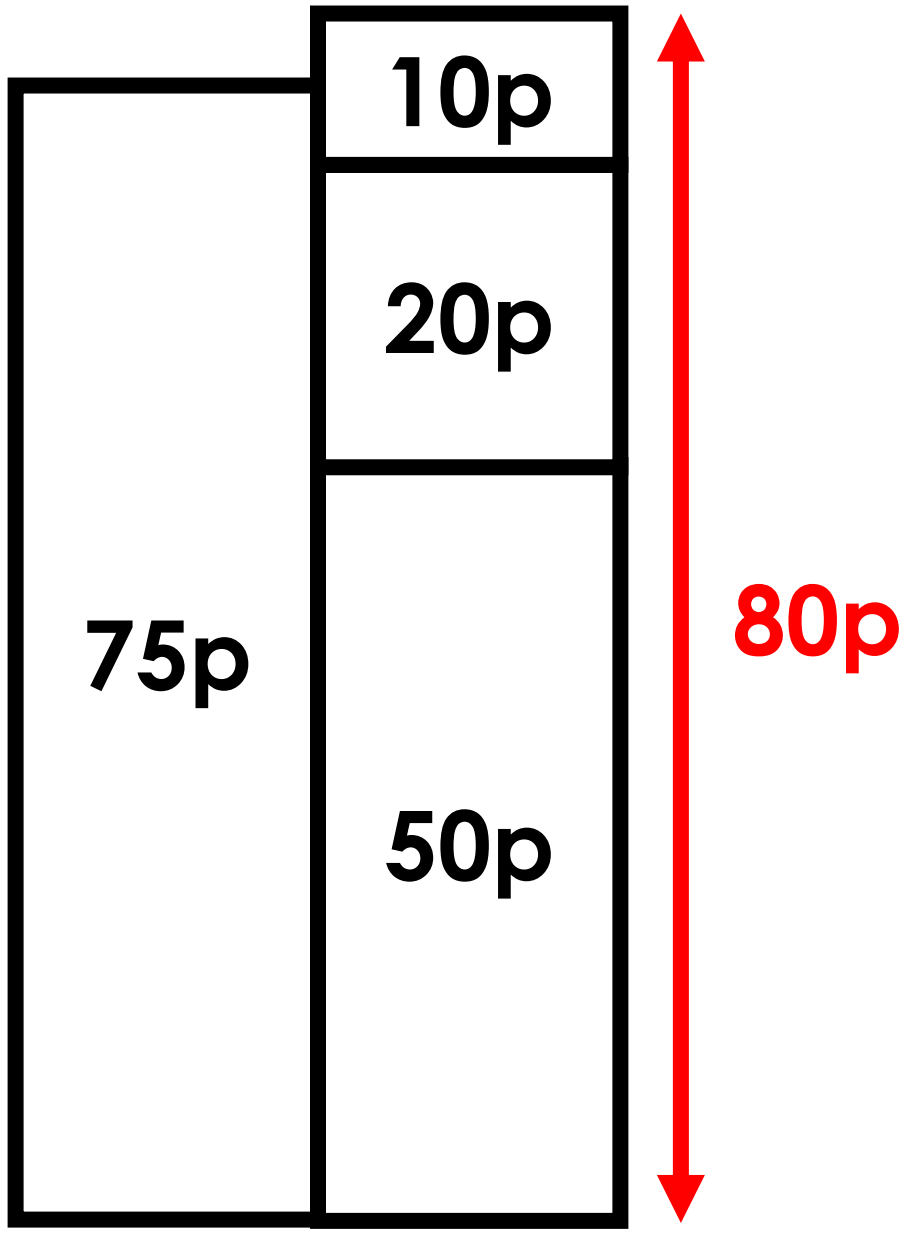
17:10



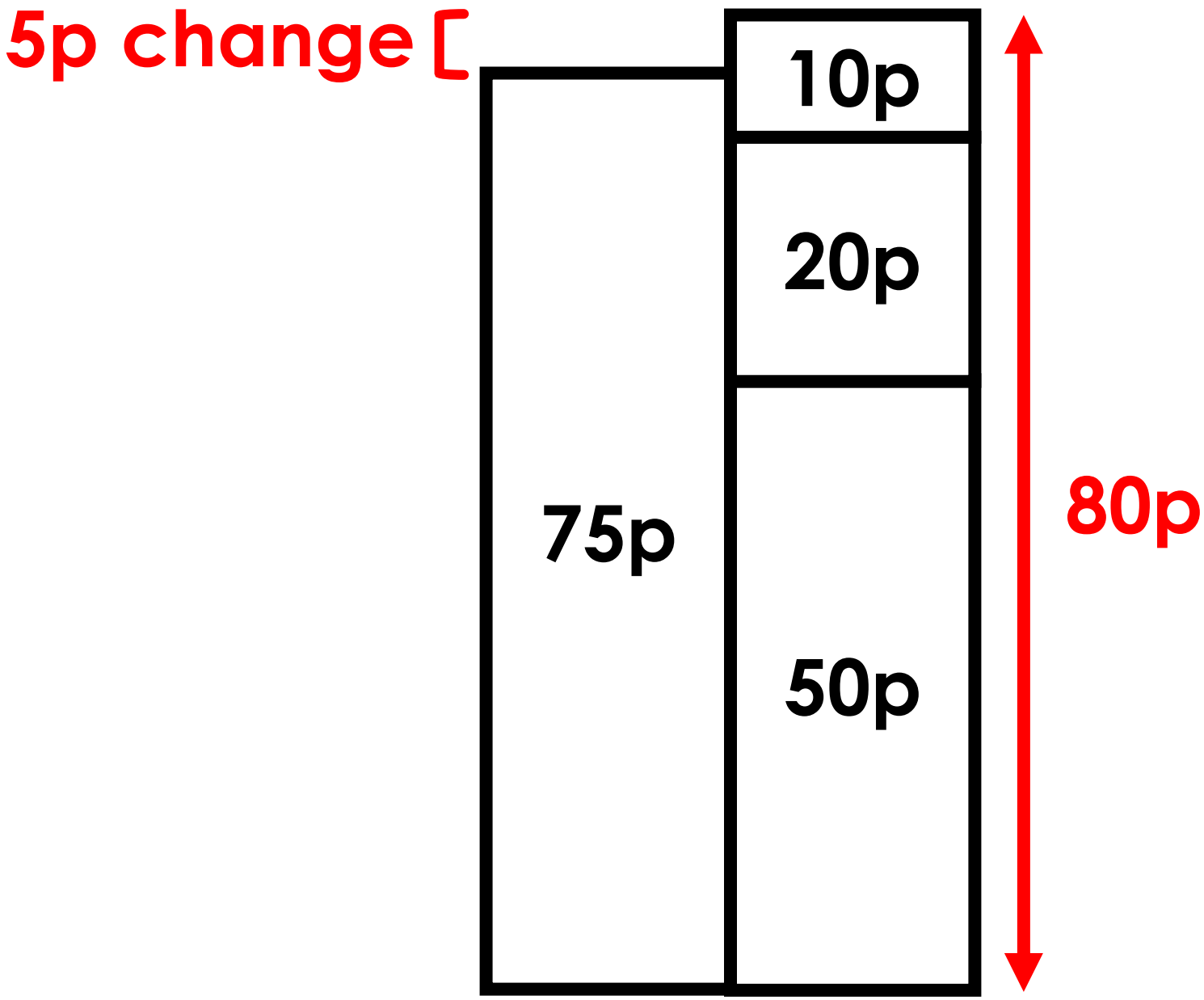
Task 43: Combinations of change

75p

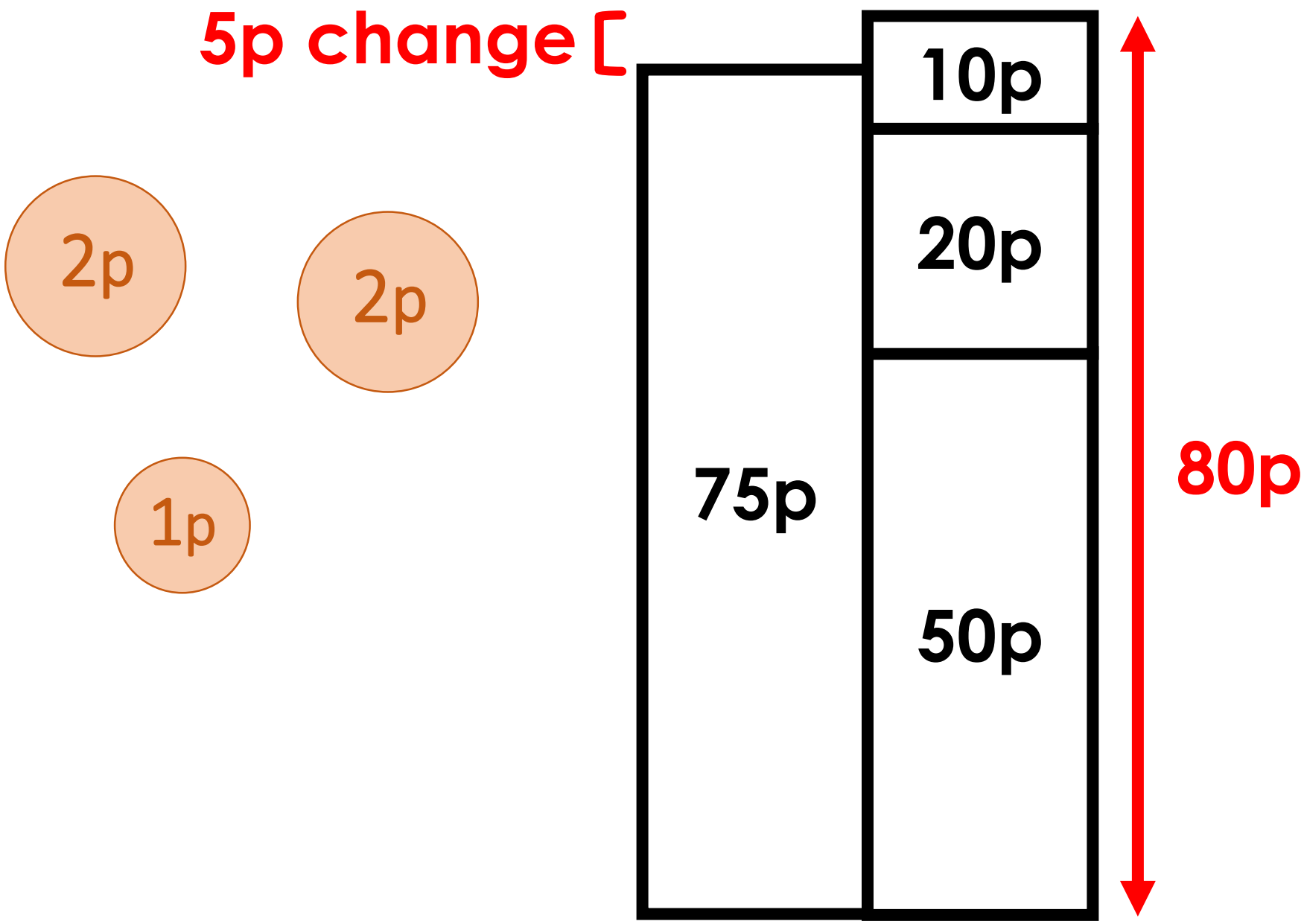
Task 43: Combinations of change



Task 43: Combinations of change



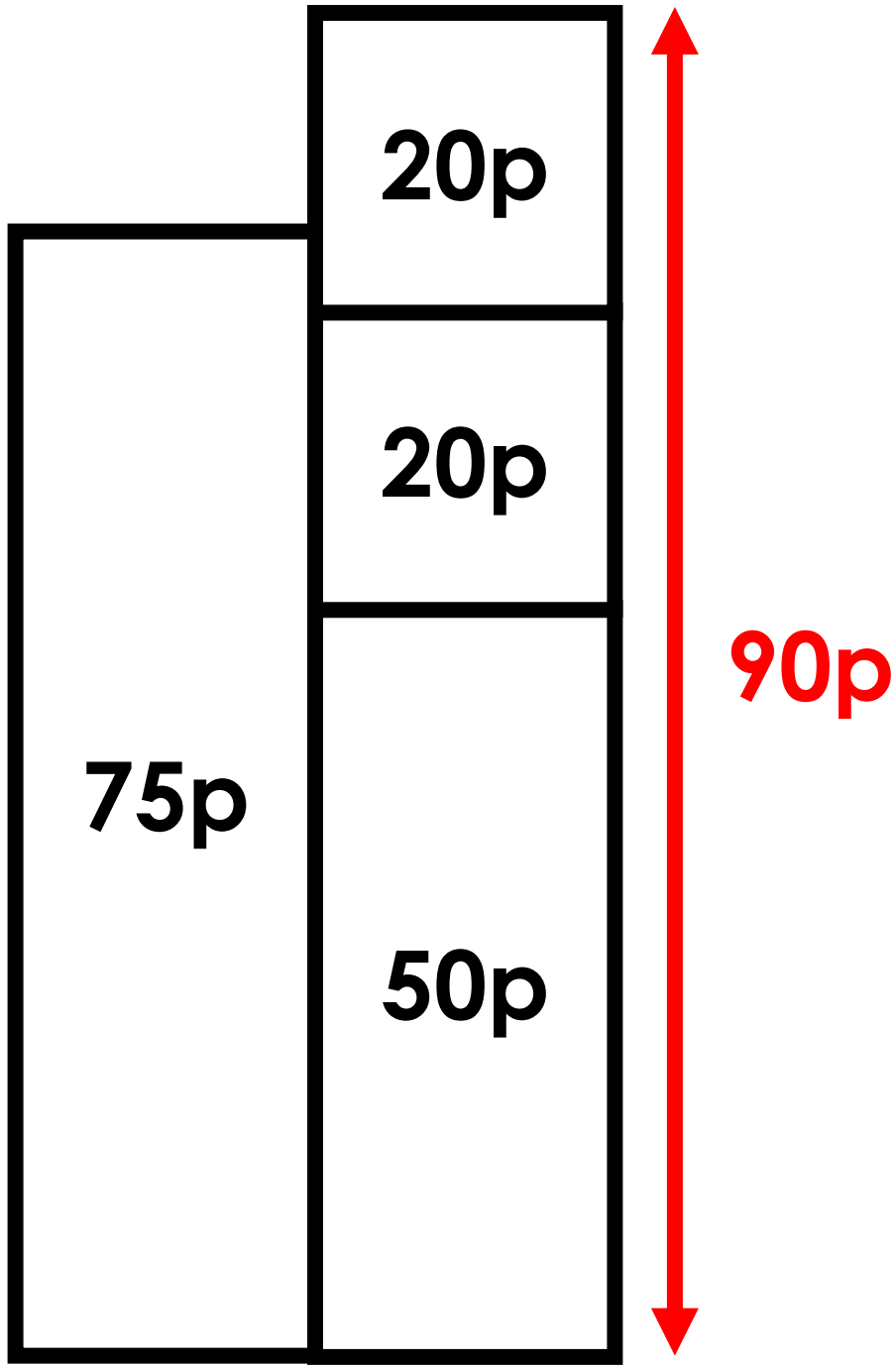
Task 43: Combinations of change



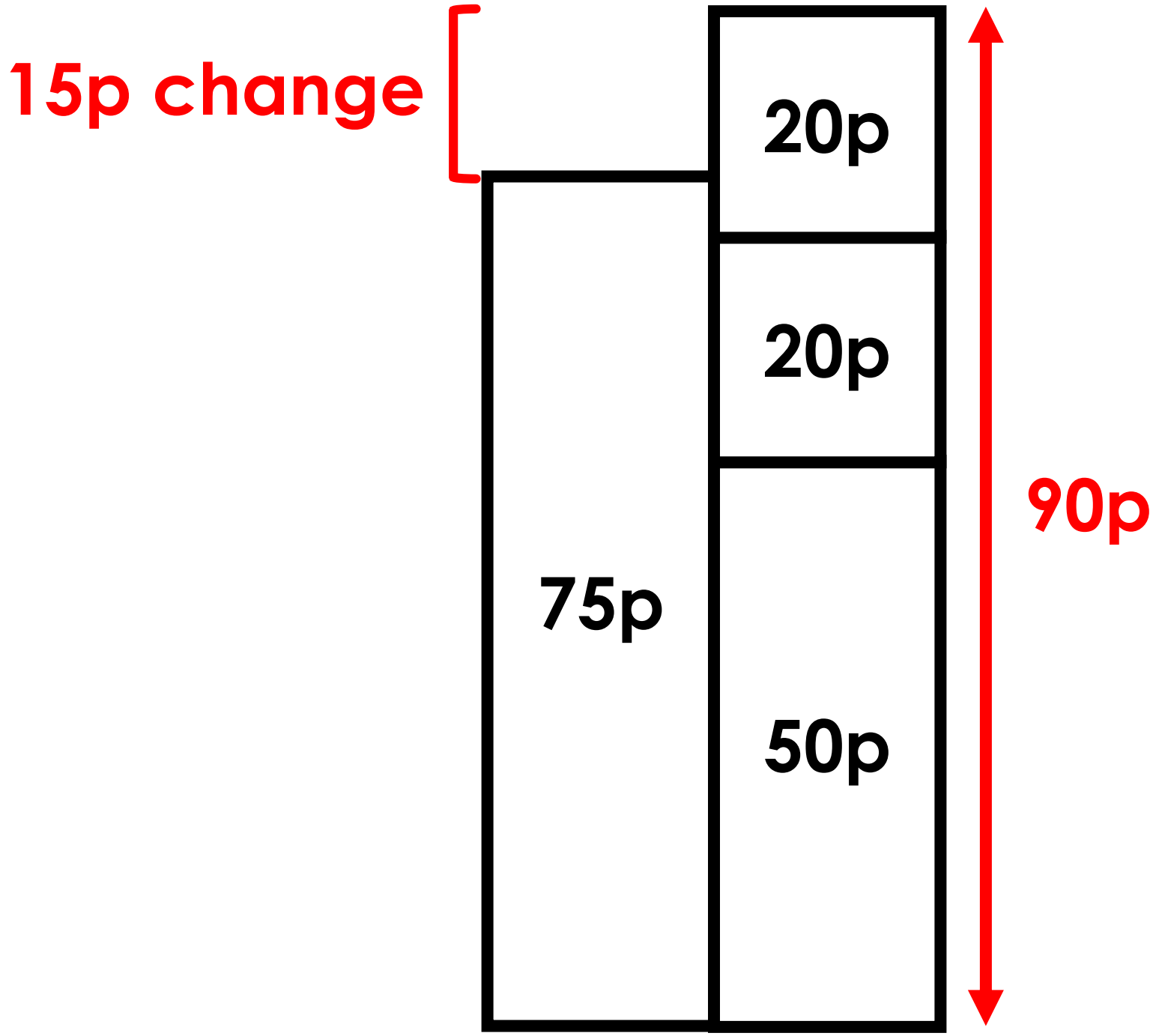
Task 43: Combinations of change

75p

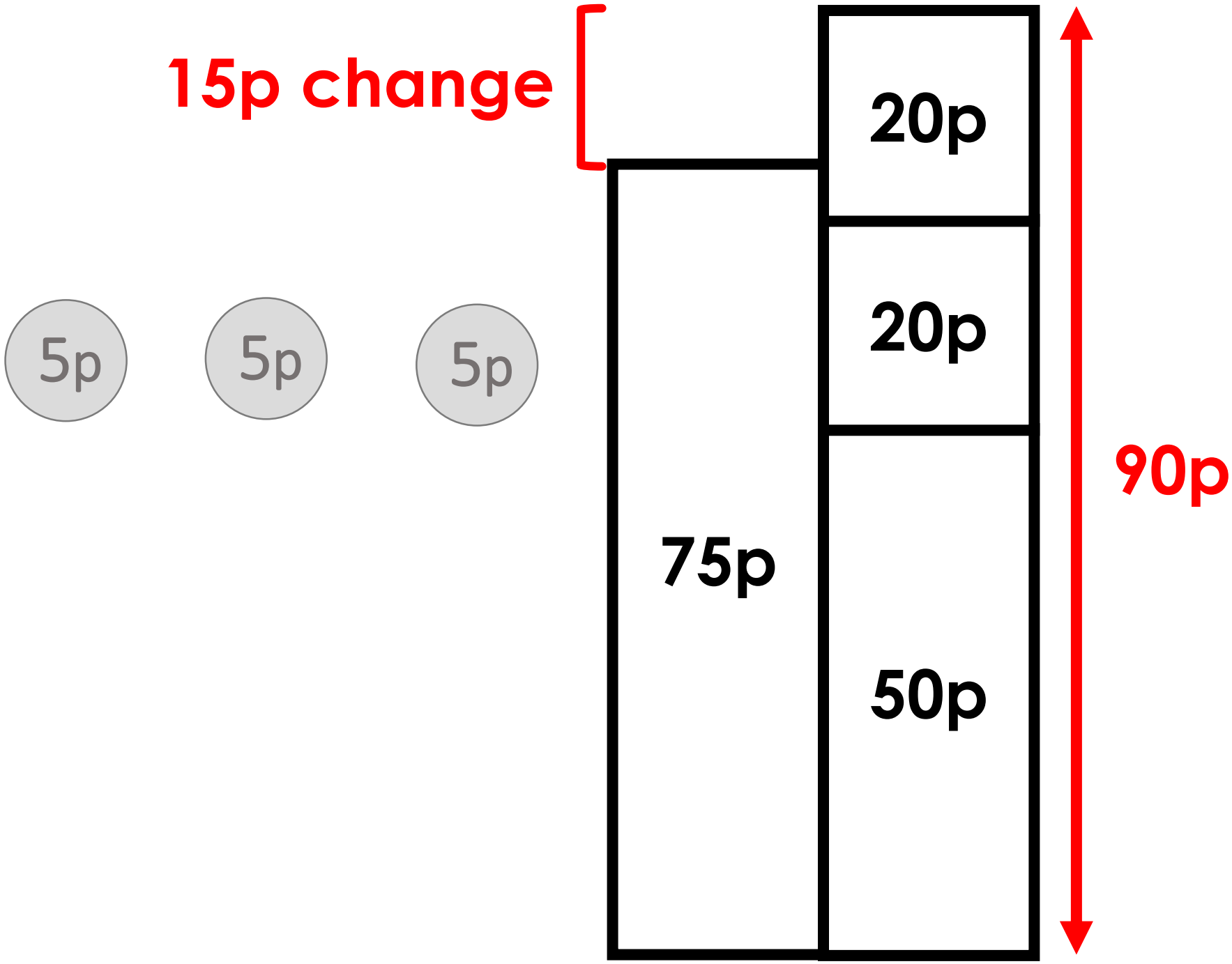
Task 43: Combinations of change



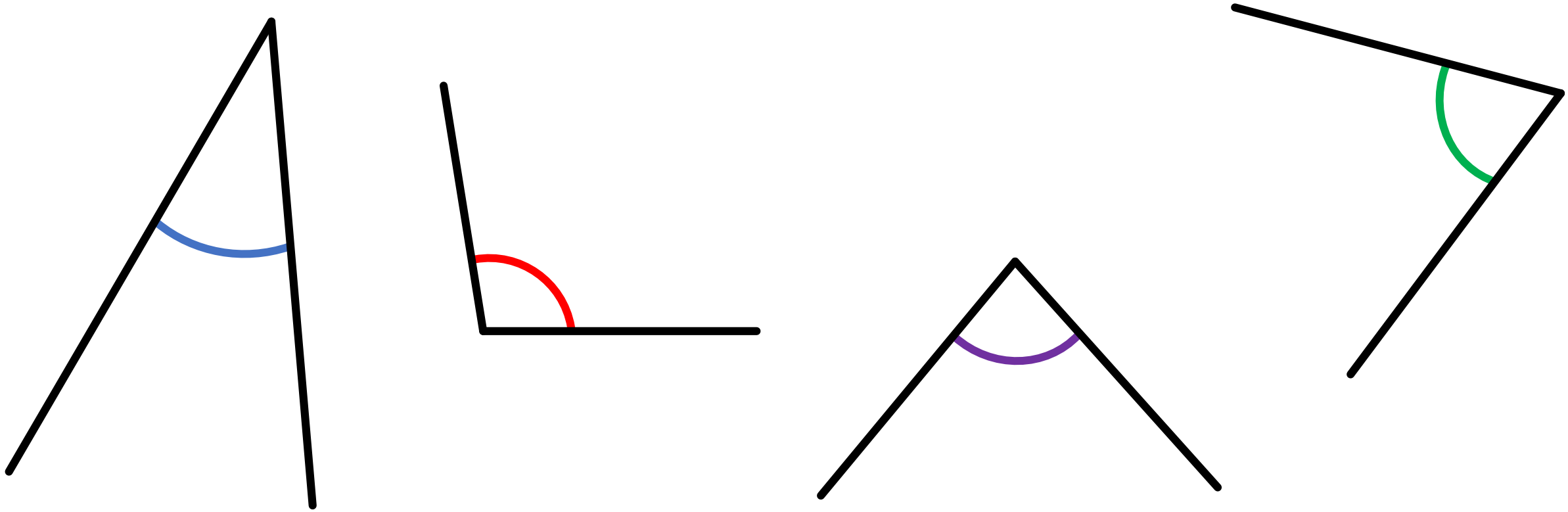
Task 43: Combinations of change



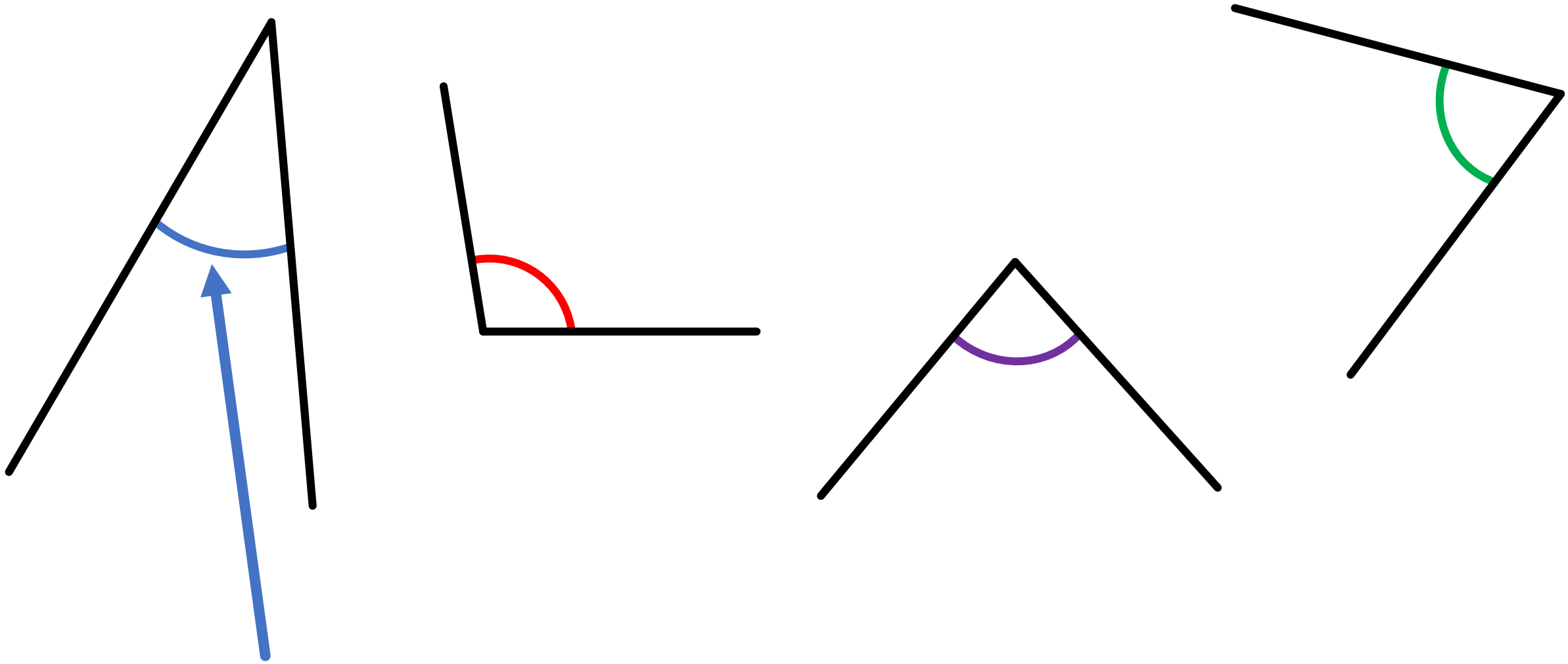
Task 43: Combinations of change



Task 44: Comparing angles

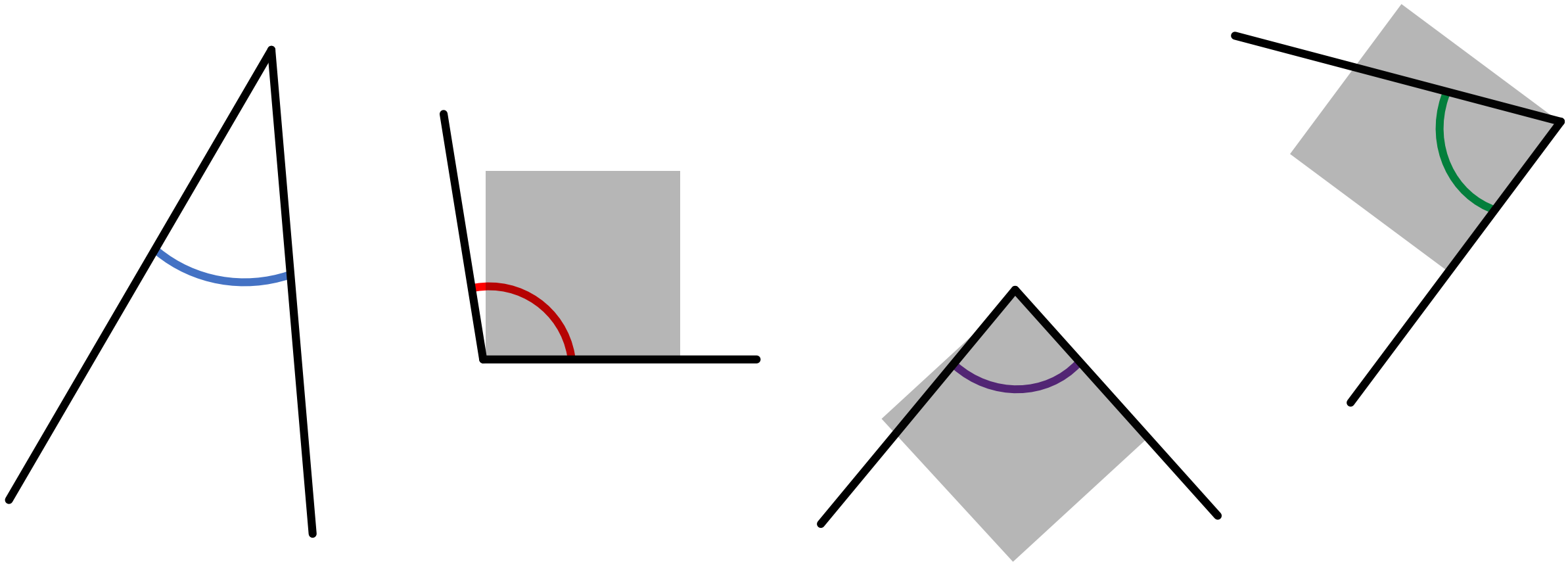


Task 44: Comparing angles



By looking, the blue angle is the smallest

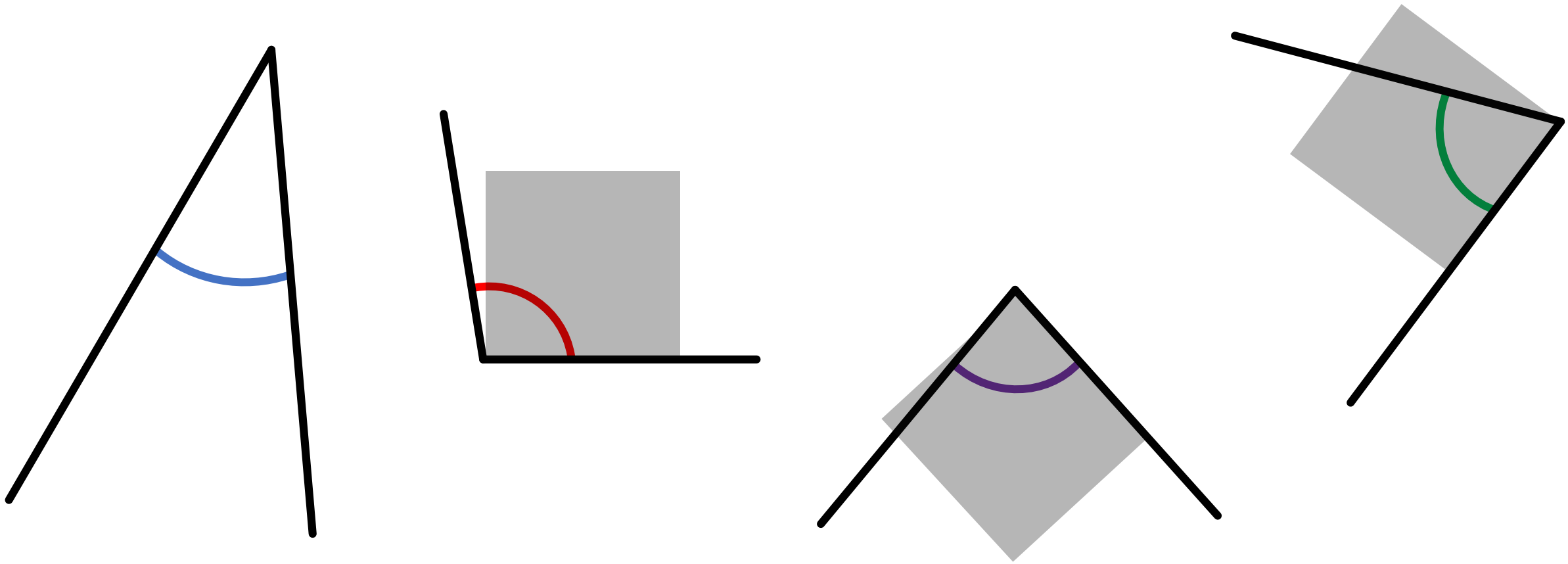
Task 44: Comparing angles



Test using right-angle:

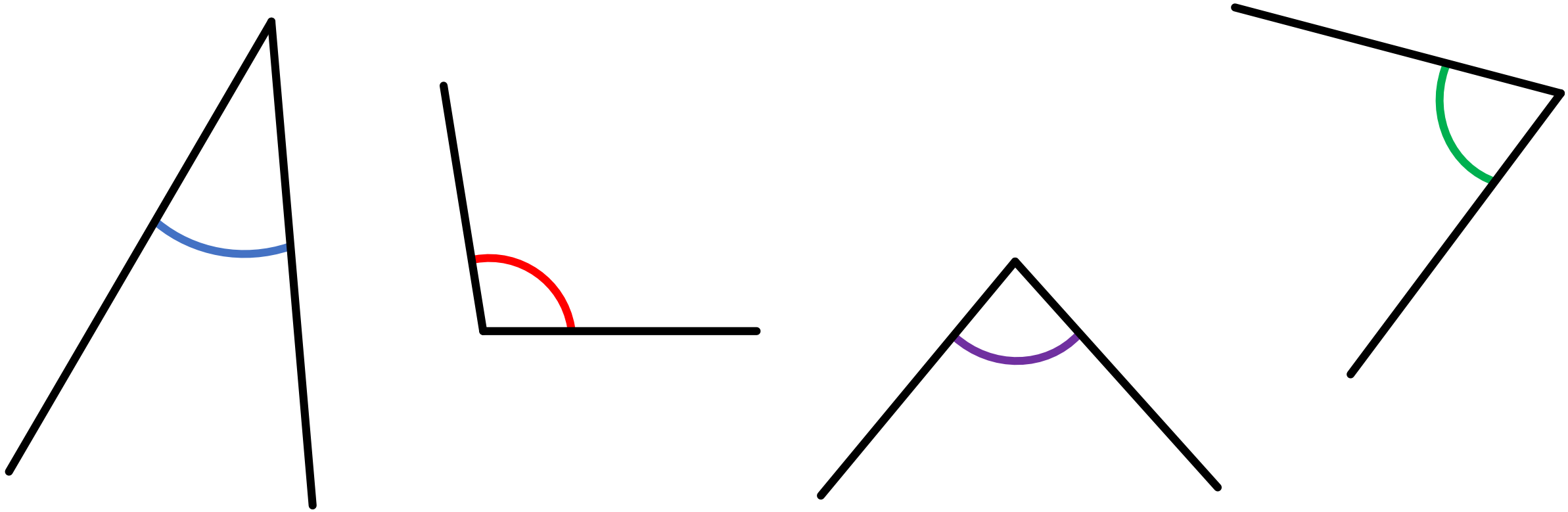
Red angle only obtuse angle

Task 44: Comparing angles



Test using right-angle:
Purple angle larger than green angle

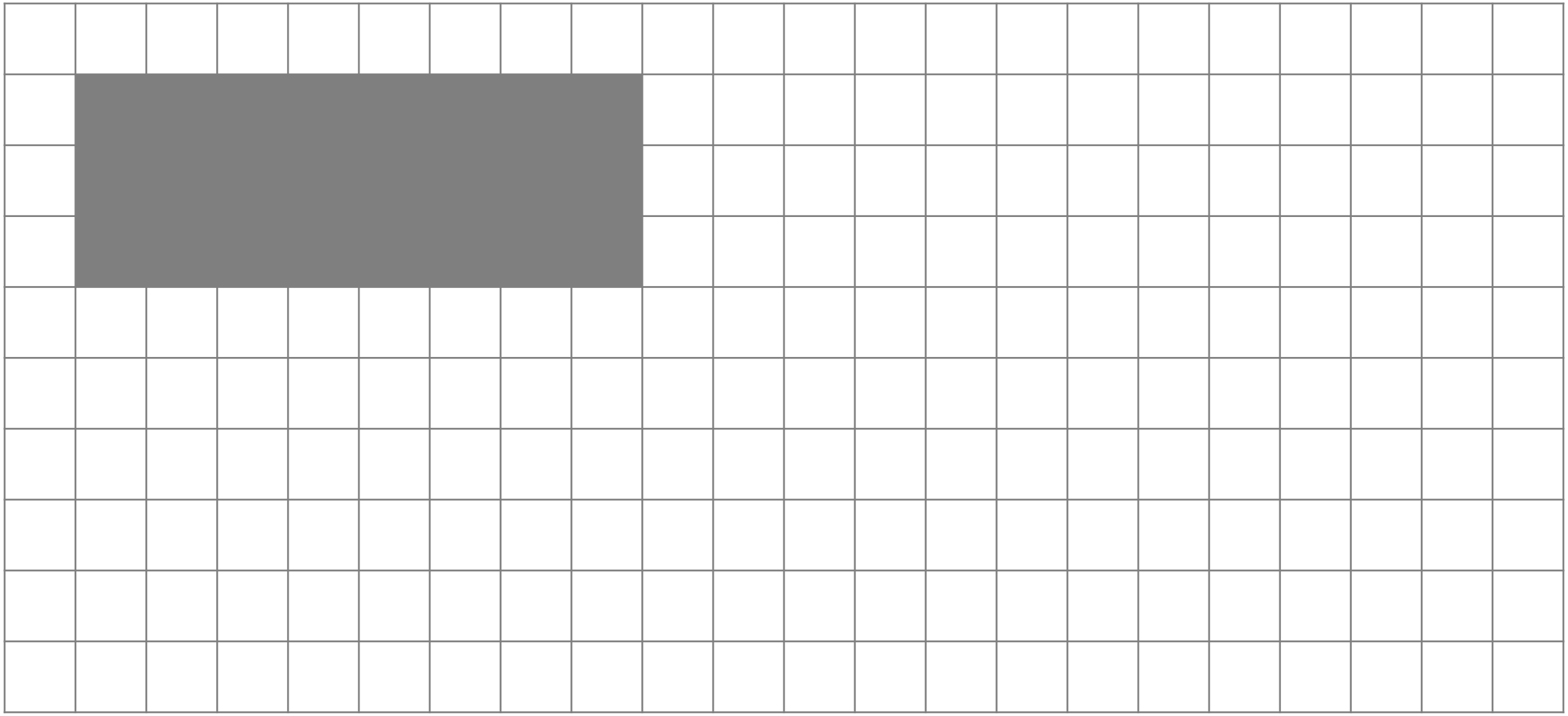
Task 44: Comparing angles



Smallest to largest:

blue, green, purple, red.

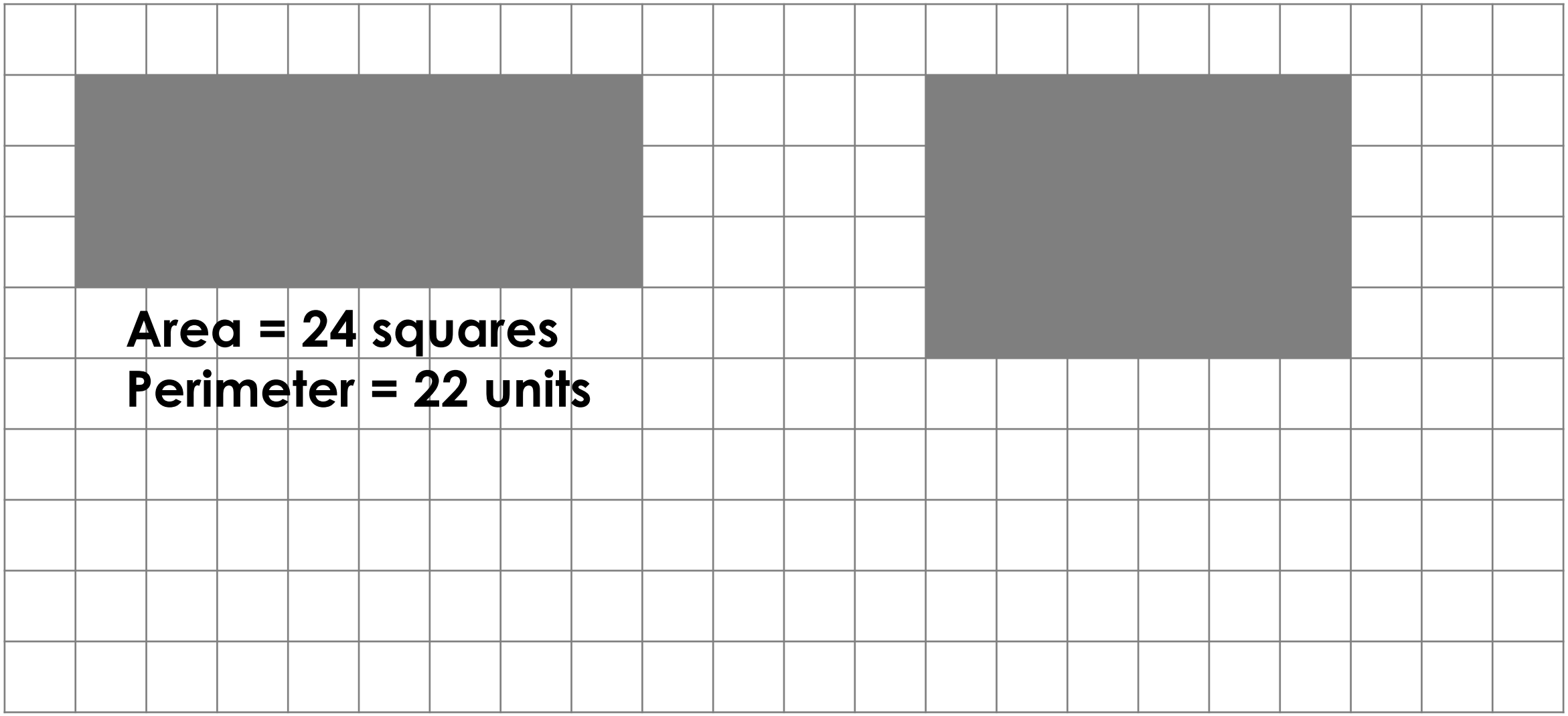
Task 45: Area and perimeter



Task 45: Area and perimeter

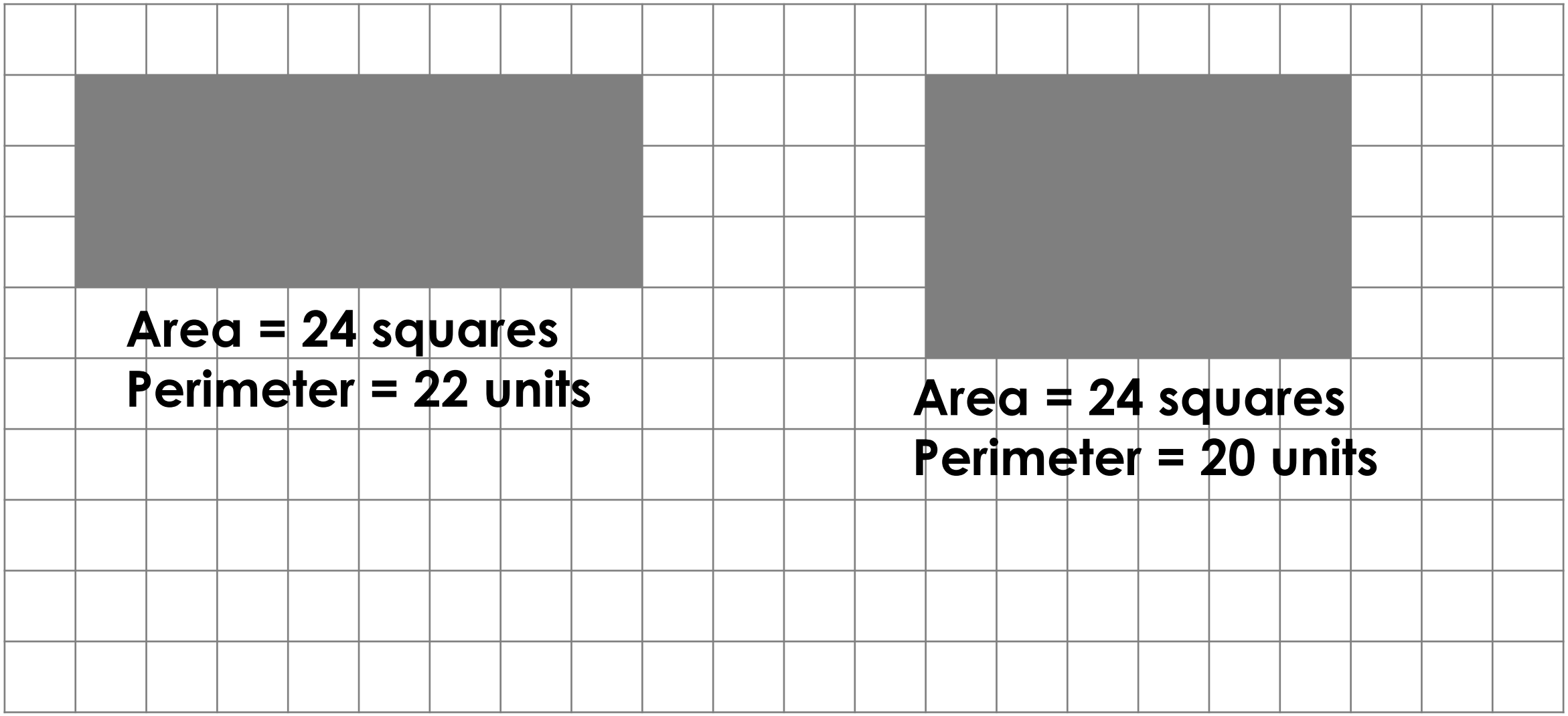
Area = 24 squares
Perimeter = 22 units

Task 45: Area and perimeter

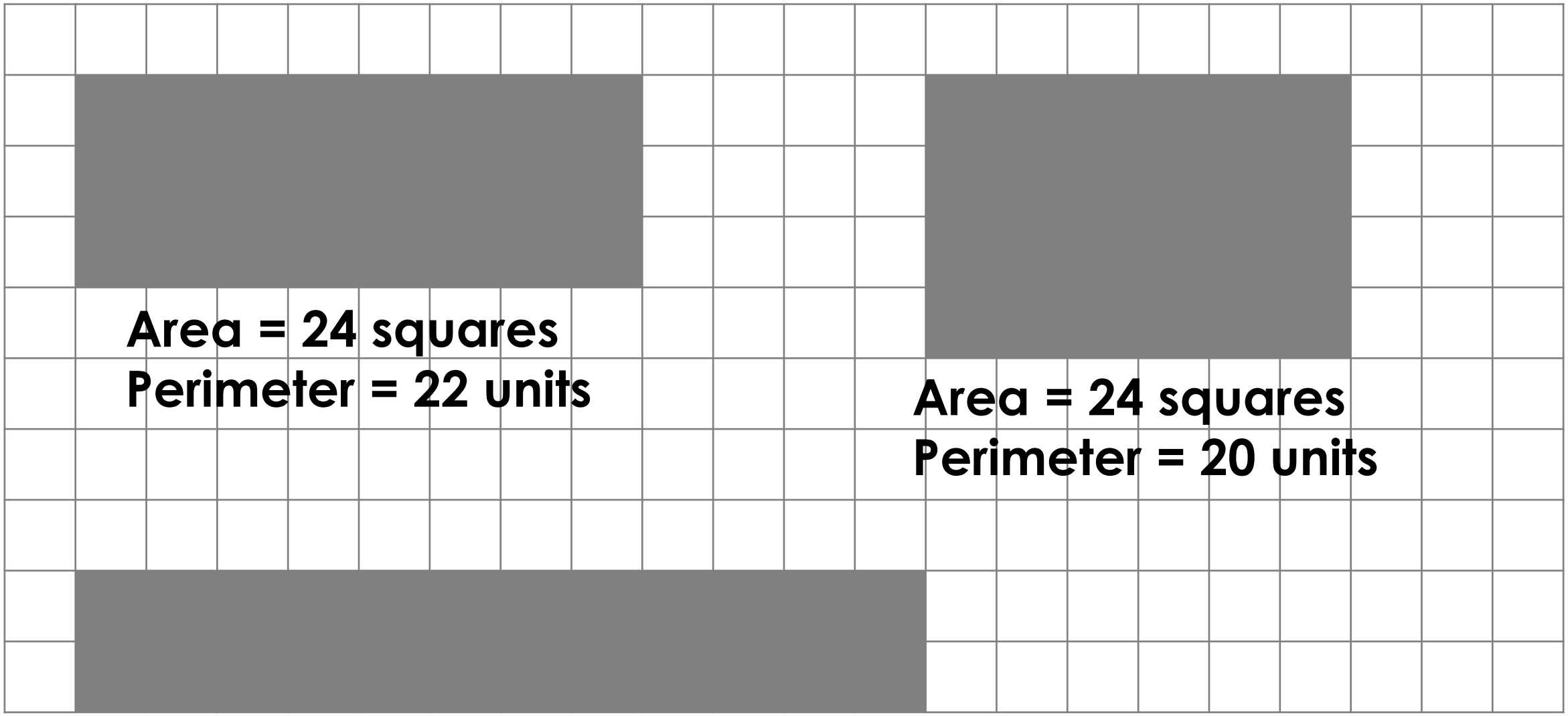


Area = 24 squares
Perimeter = 22 units

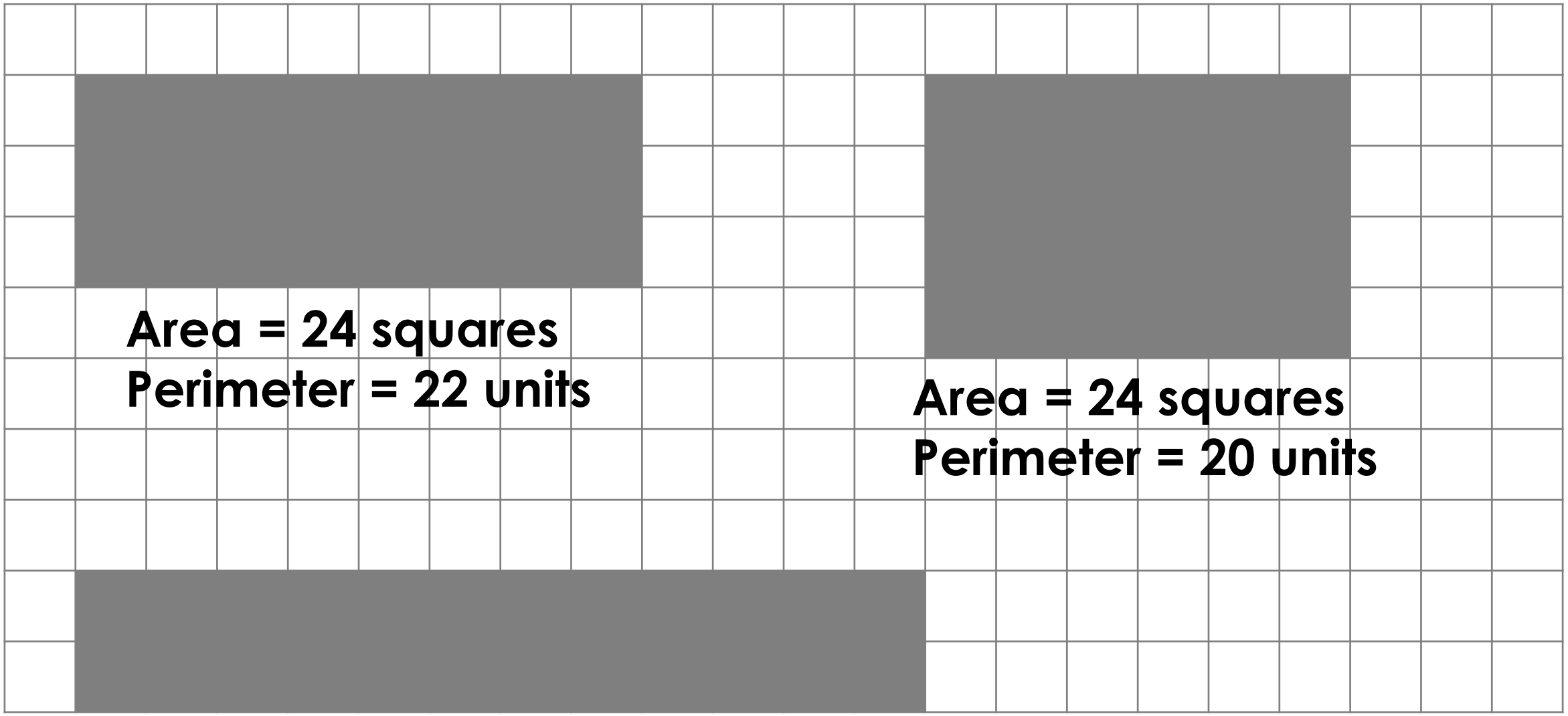
Task 45: Area and perimeter



Task 45: Area and perimeter



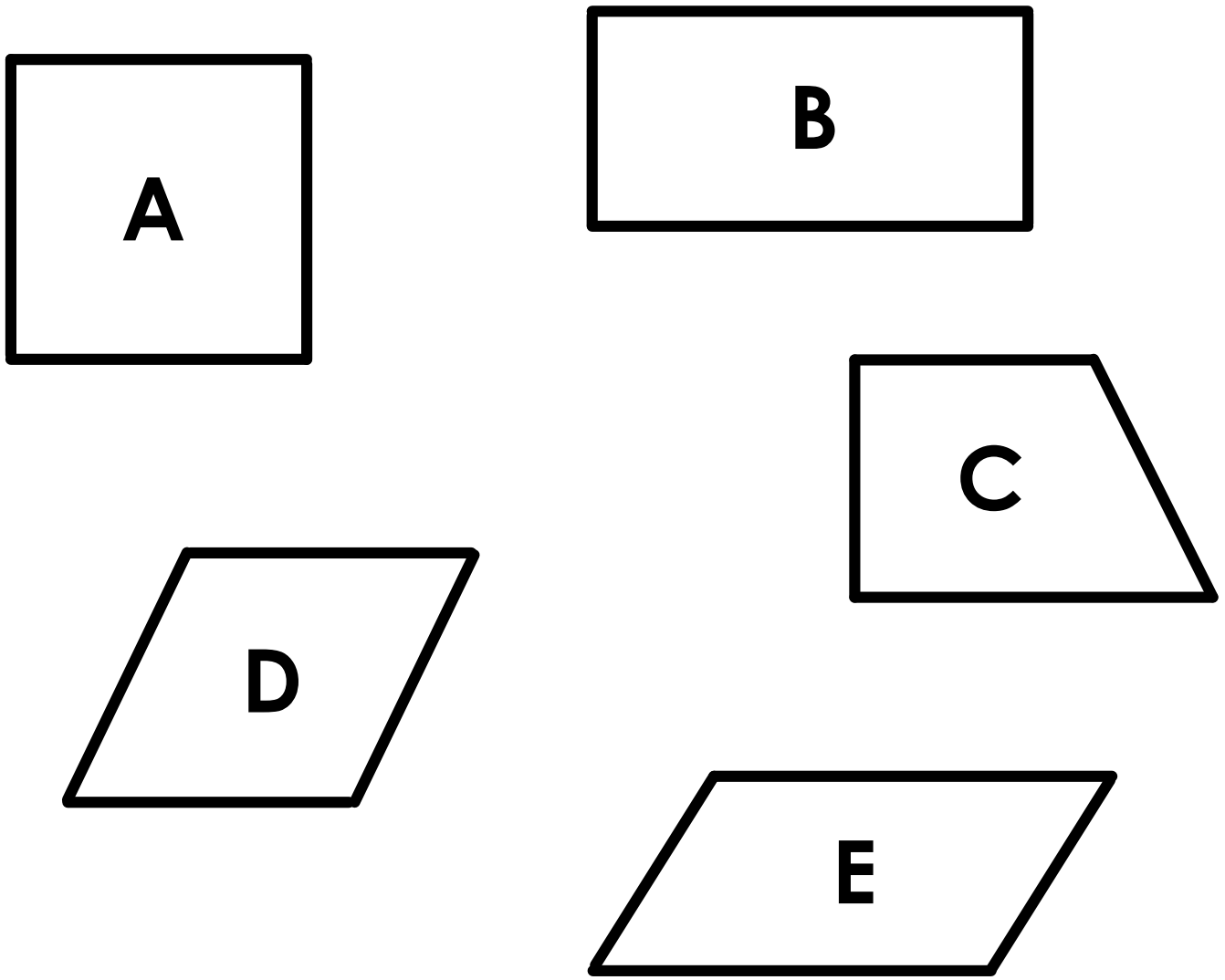
Task 45: Area and perimeter



Task 46: Shape properties

Example answer

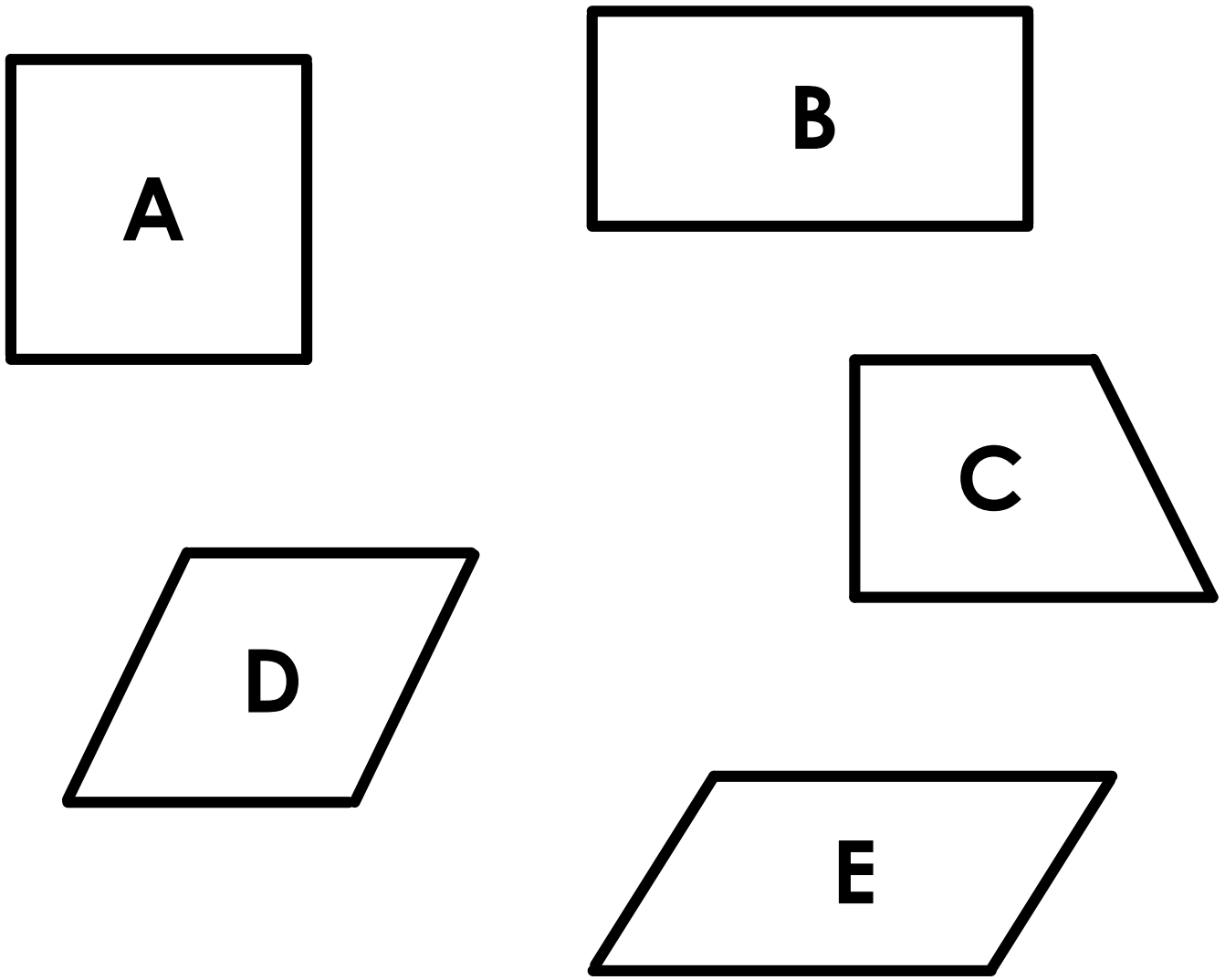
All of the shapes…



Task 46: Shape properties

Example answer

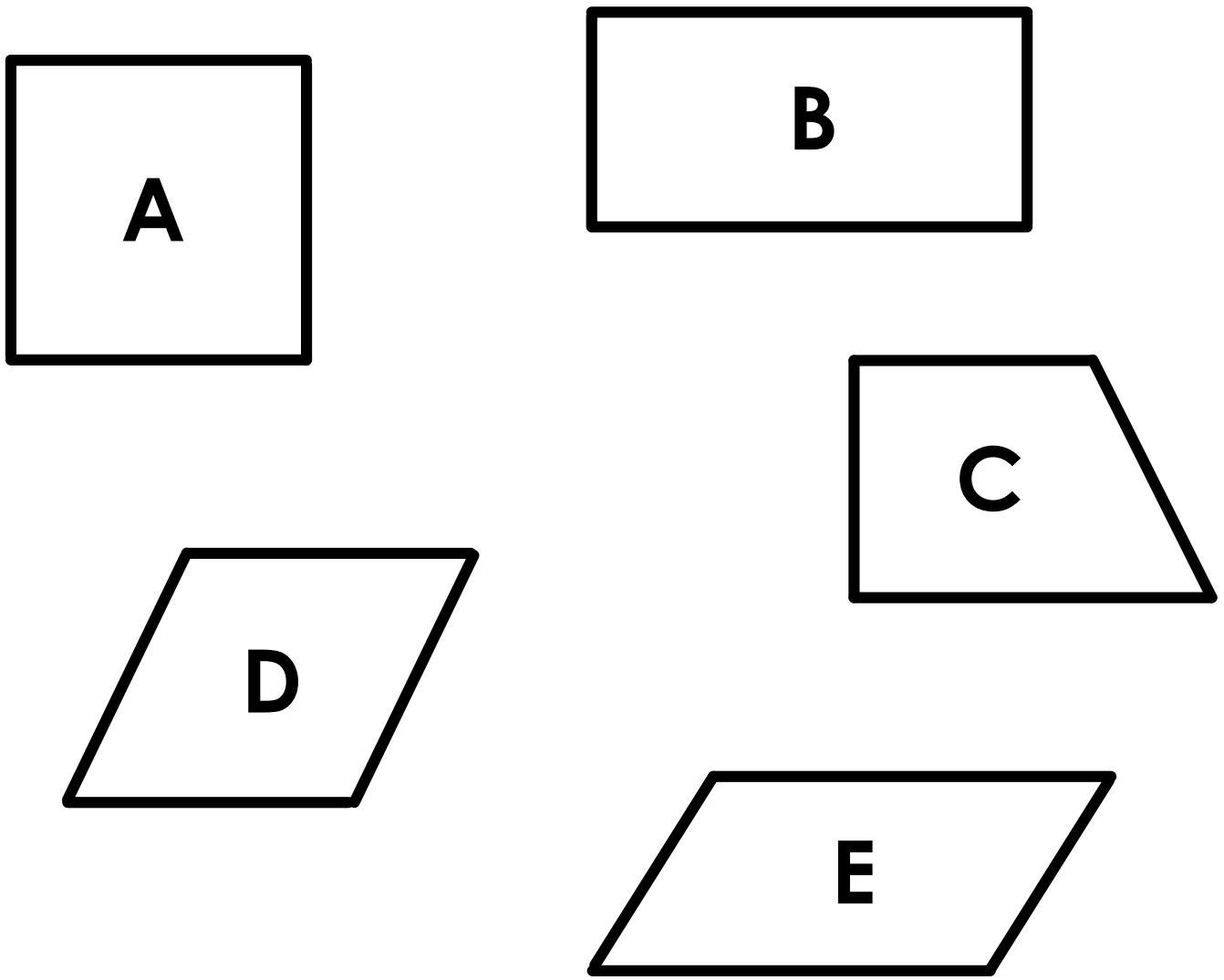
All of the shapes are quadrilaterals.



Task 46: Shape properties

Example answer

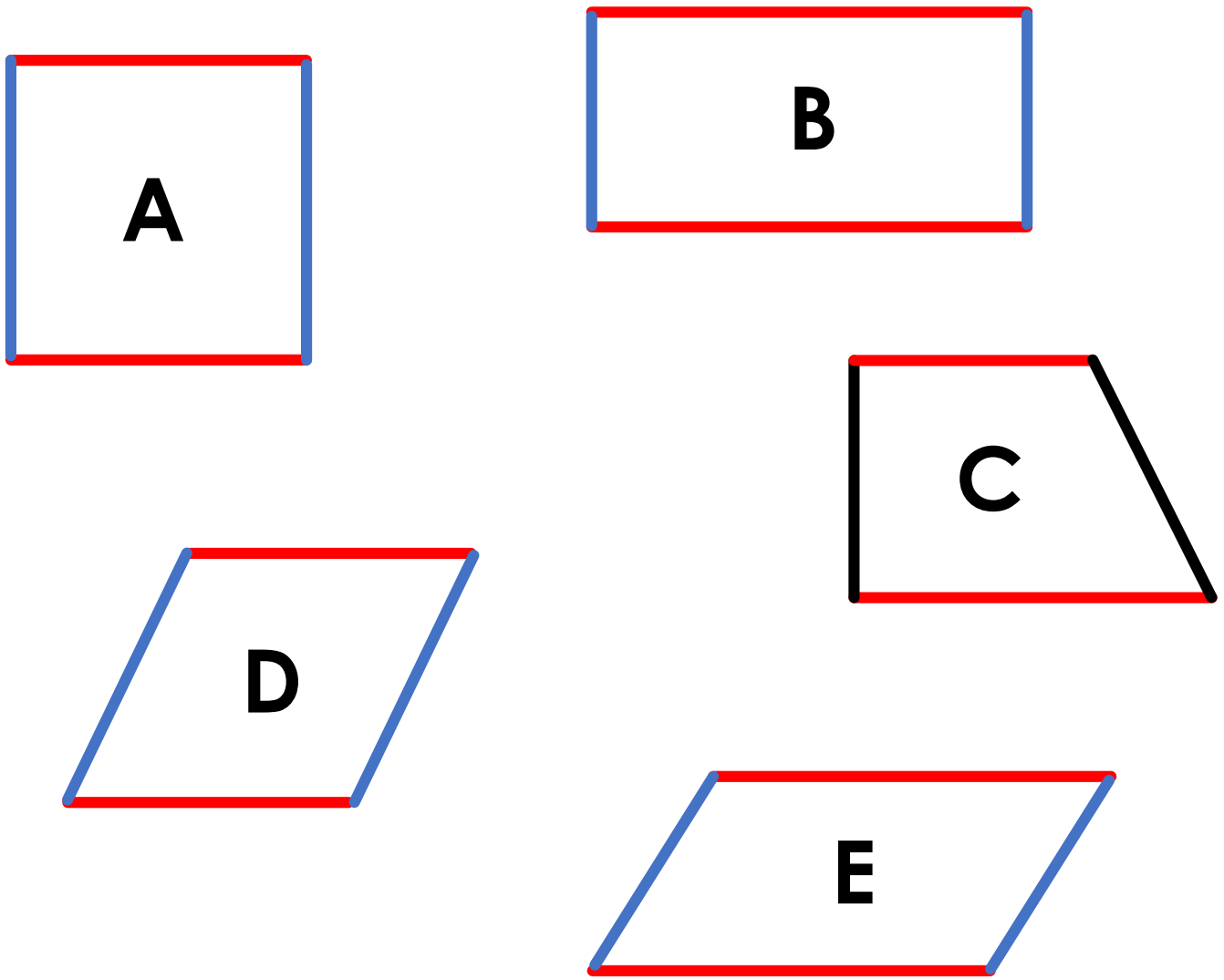
Four of the shapes…



Task 46: Shape properties

Example answer

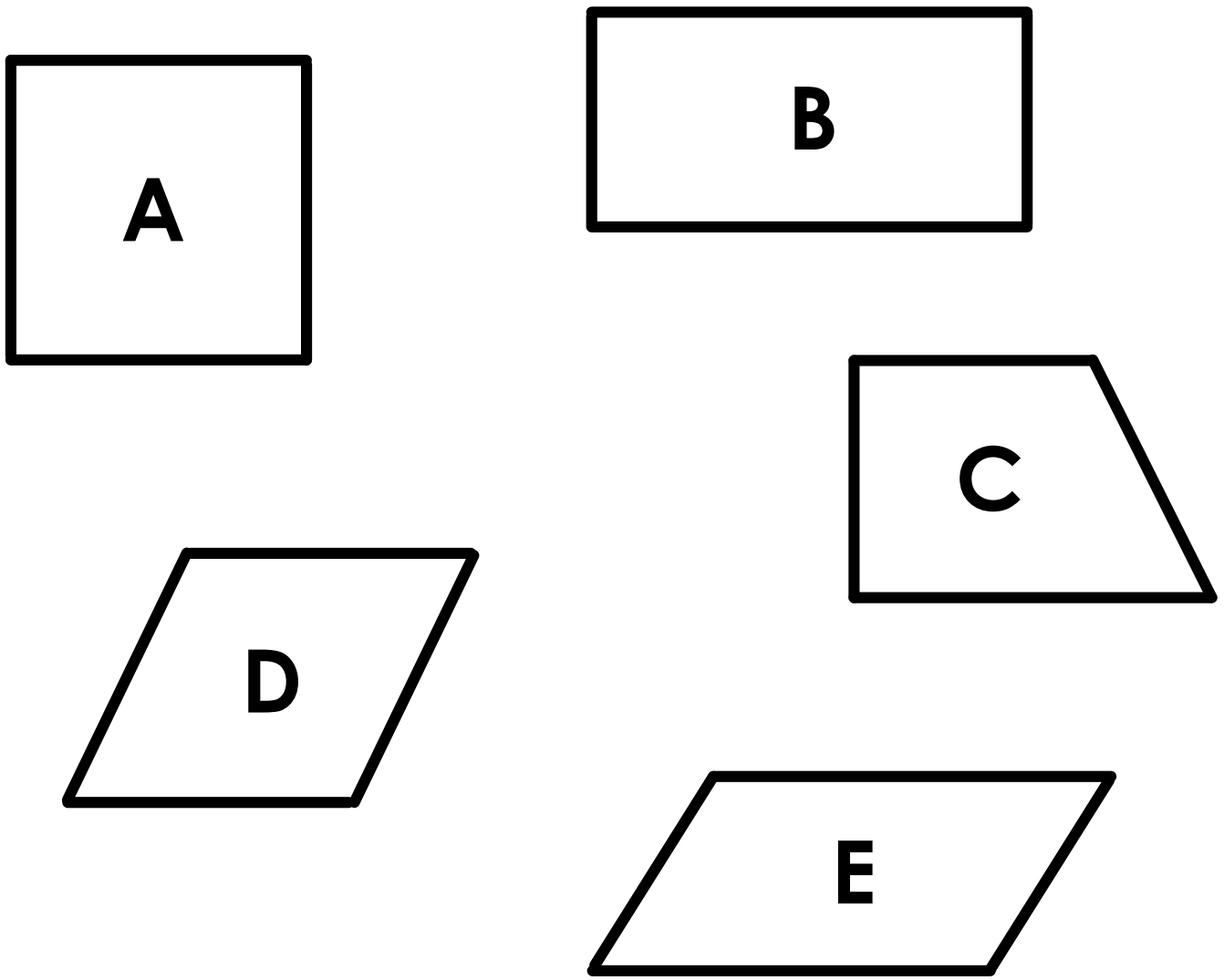
Four of the shapes have two pairs of parallel lines.



Task 46: Shape properties

Example answer

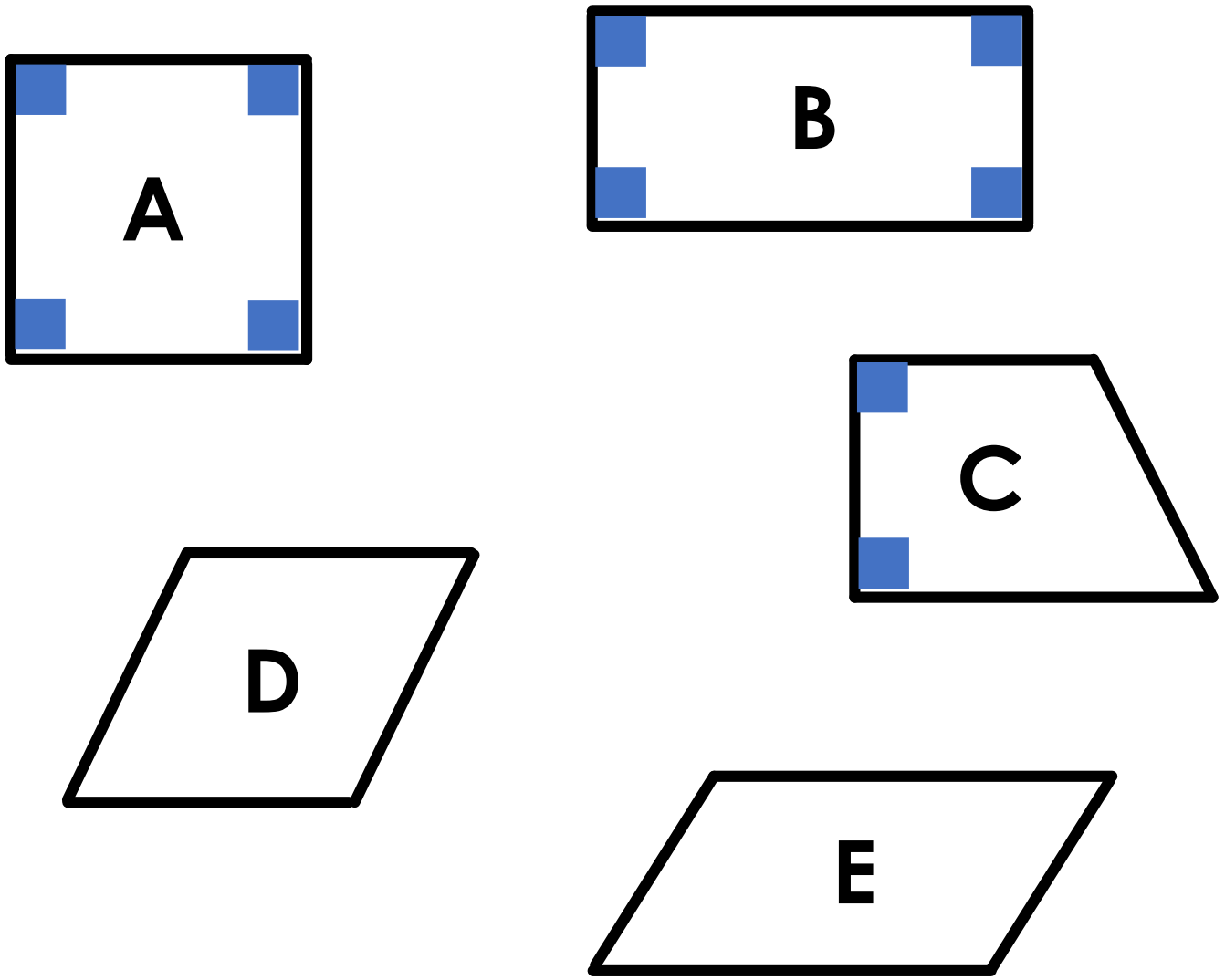
Three of the shapes…



Task 46: Shape properties

Example answer

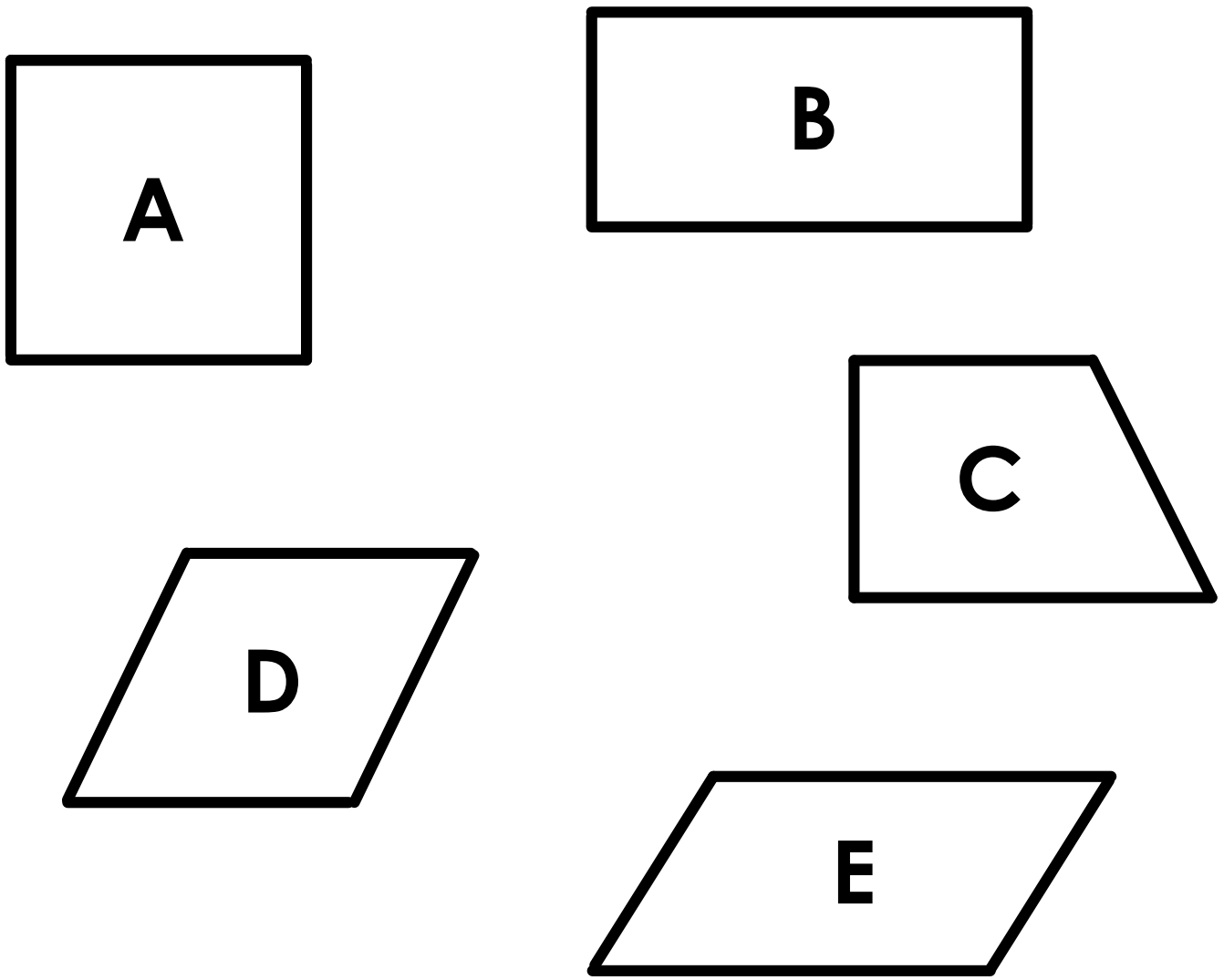
Three of the shapes have two or more right-angles.



Task 46: Shape properties

Example answer

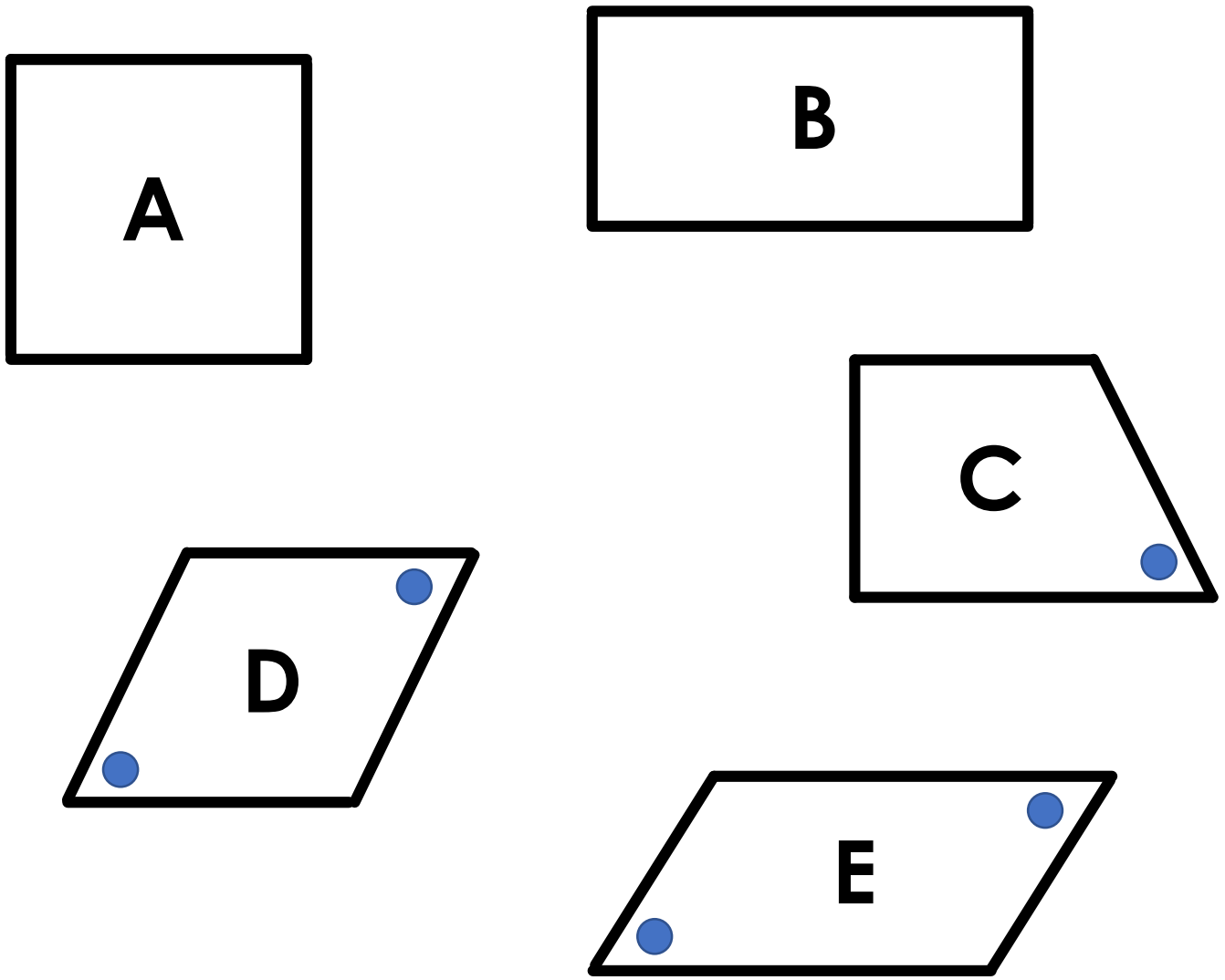
Two of the shapes…



Task 46: Shape properties

Example answer

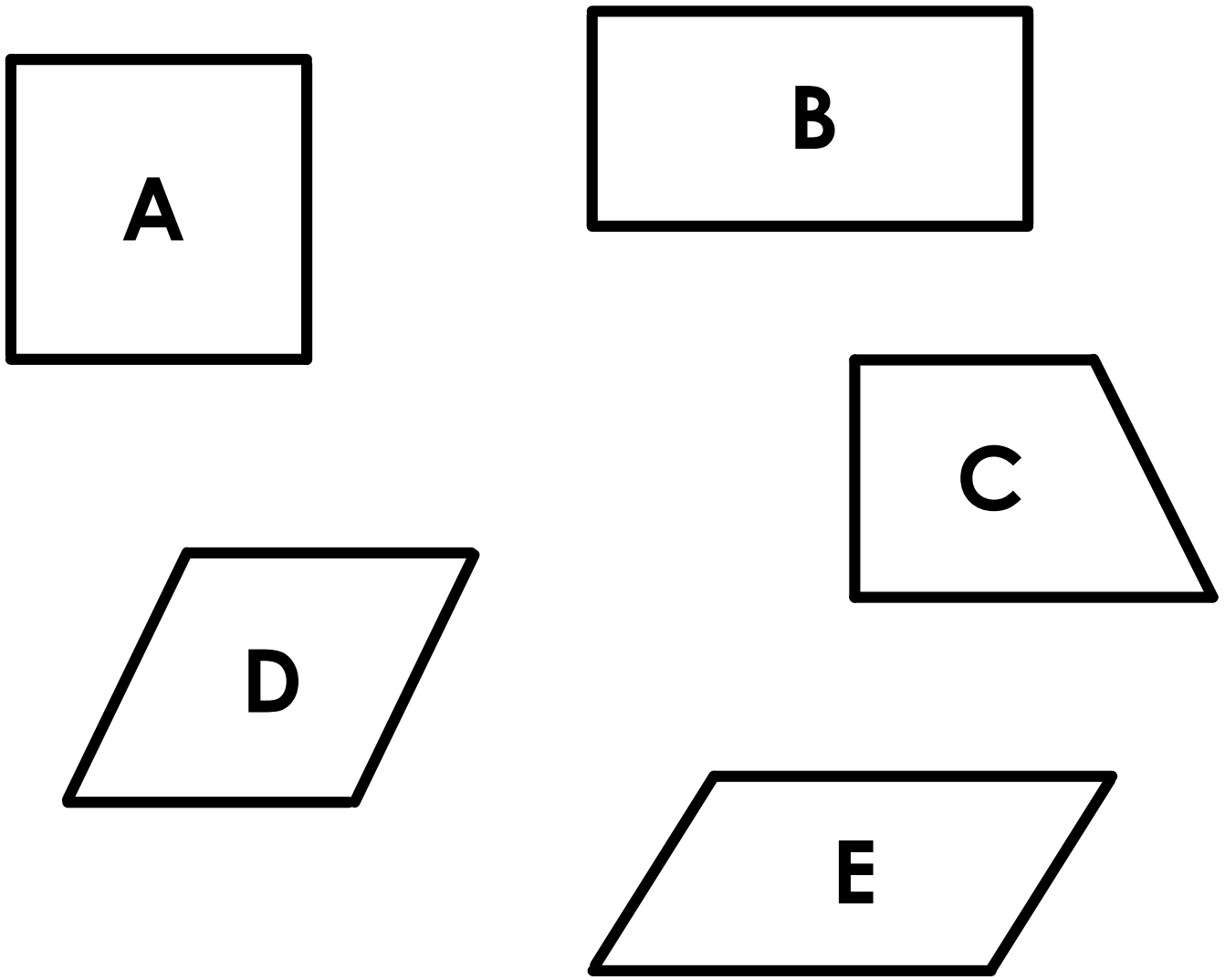
Two of the shapes have two acute angles.



Task 46: Shape properties

Example answer

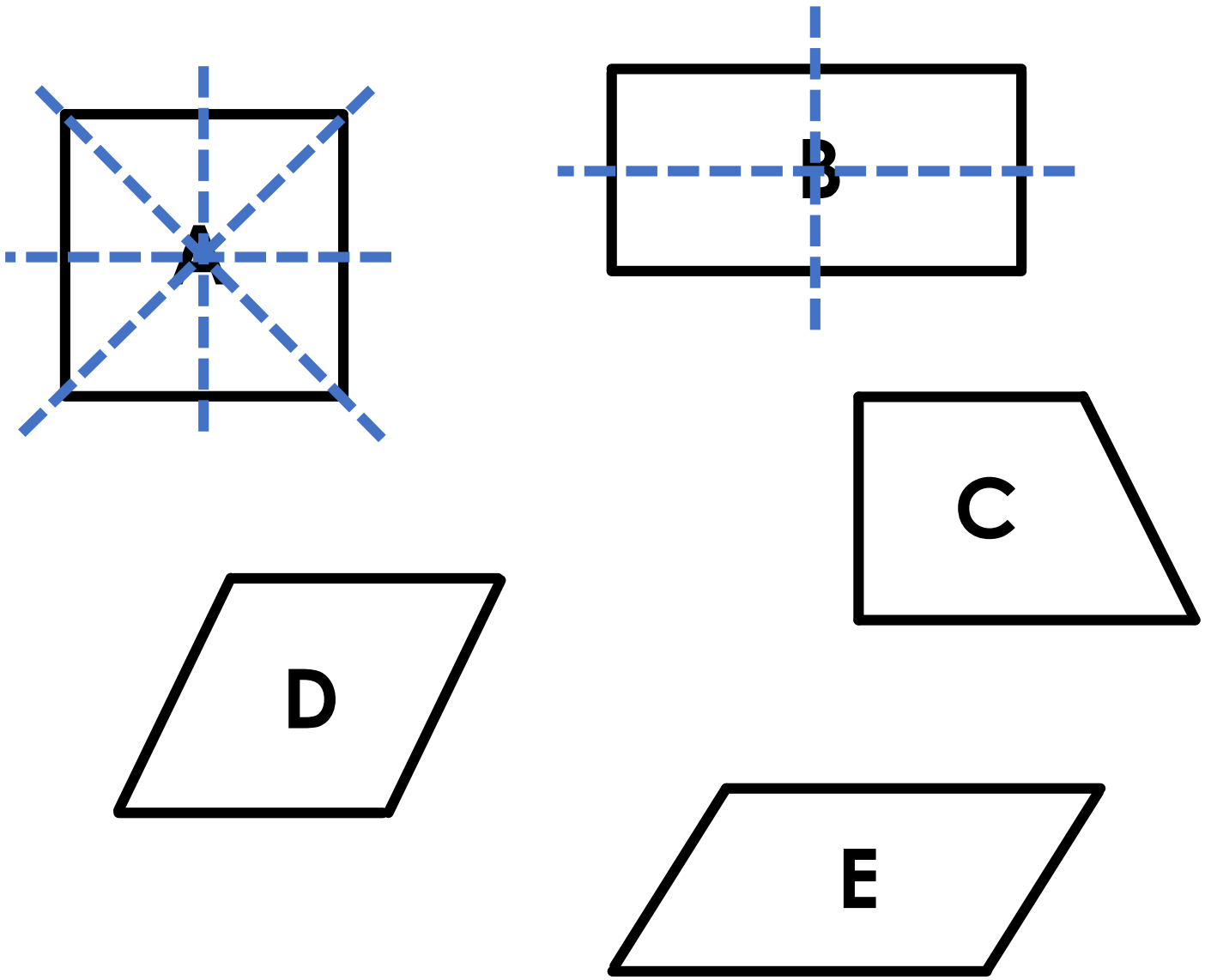
One of the shapes…



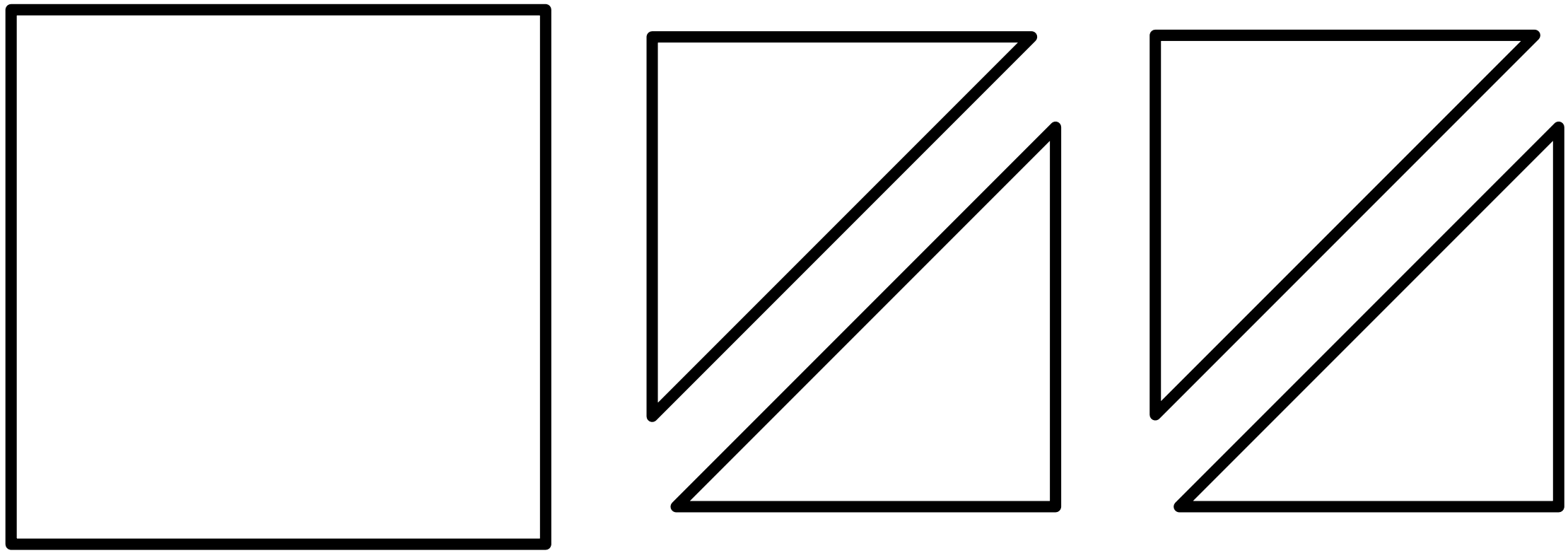
Task 46: Shape properties

Example answer

One of the shapes has four lines of symmetry.

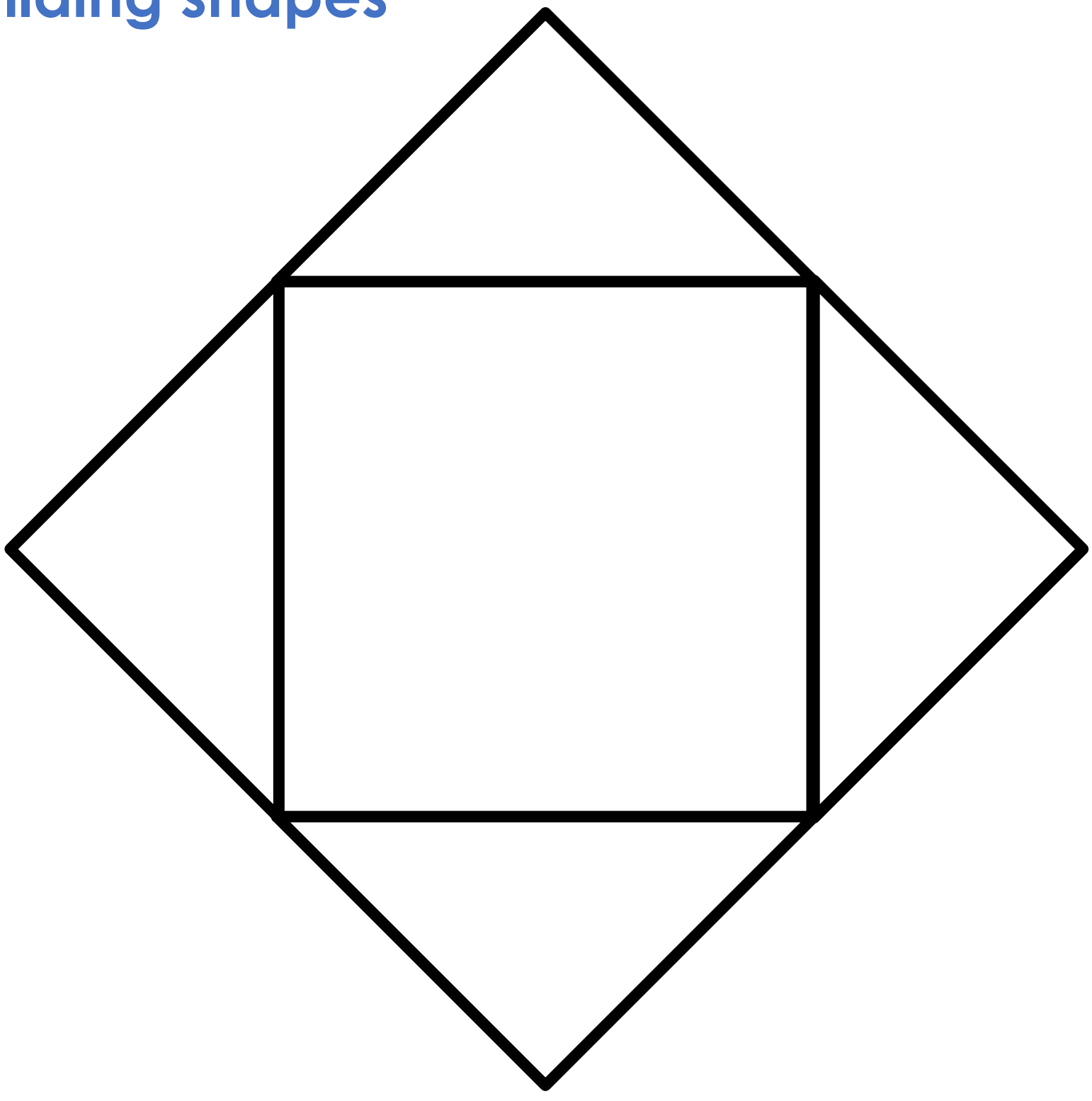


Task 47: Building shapes



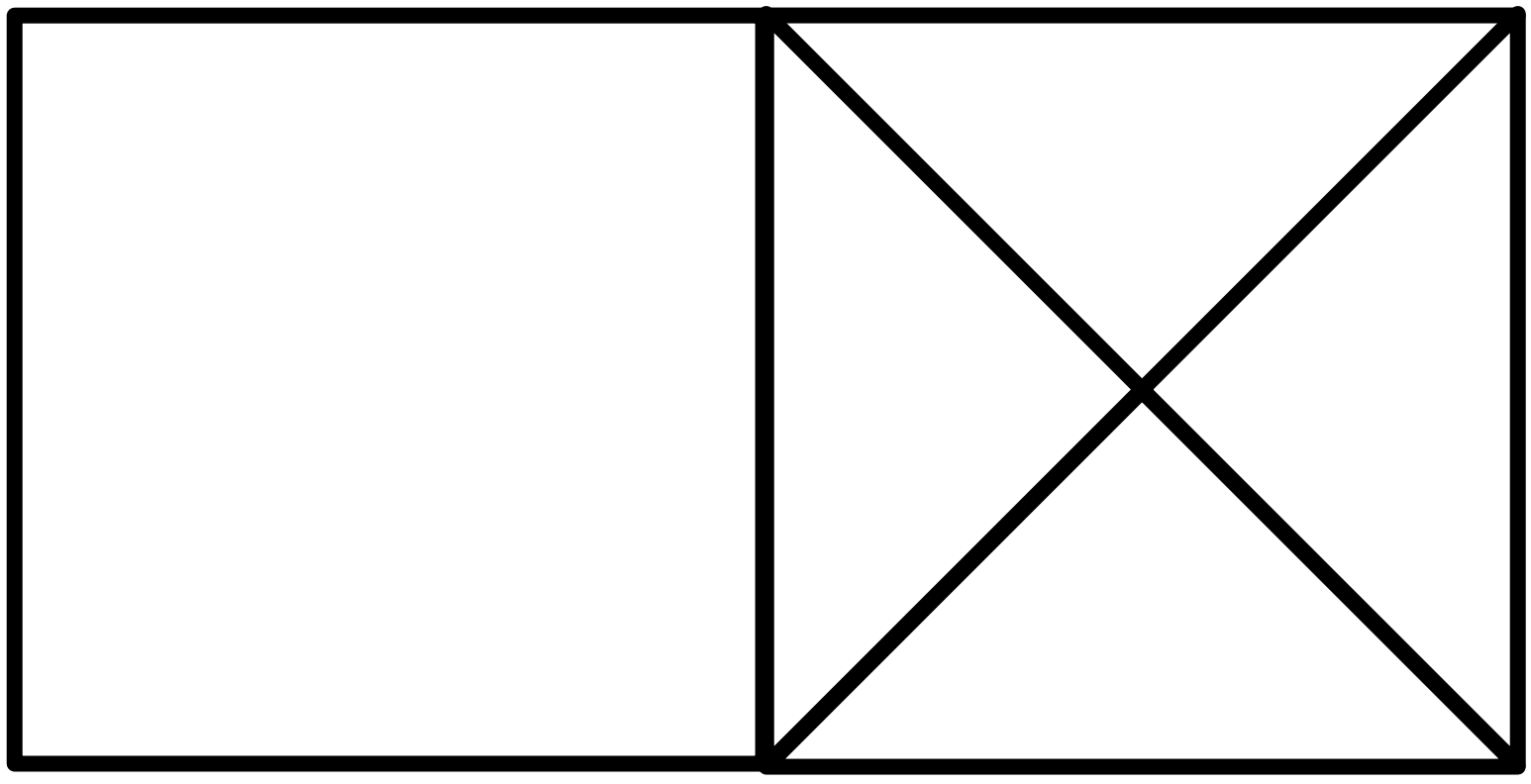
Task 47: Building shapes

Square:



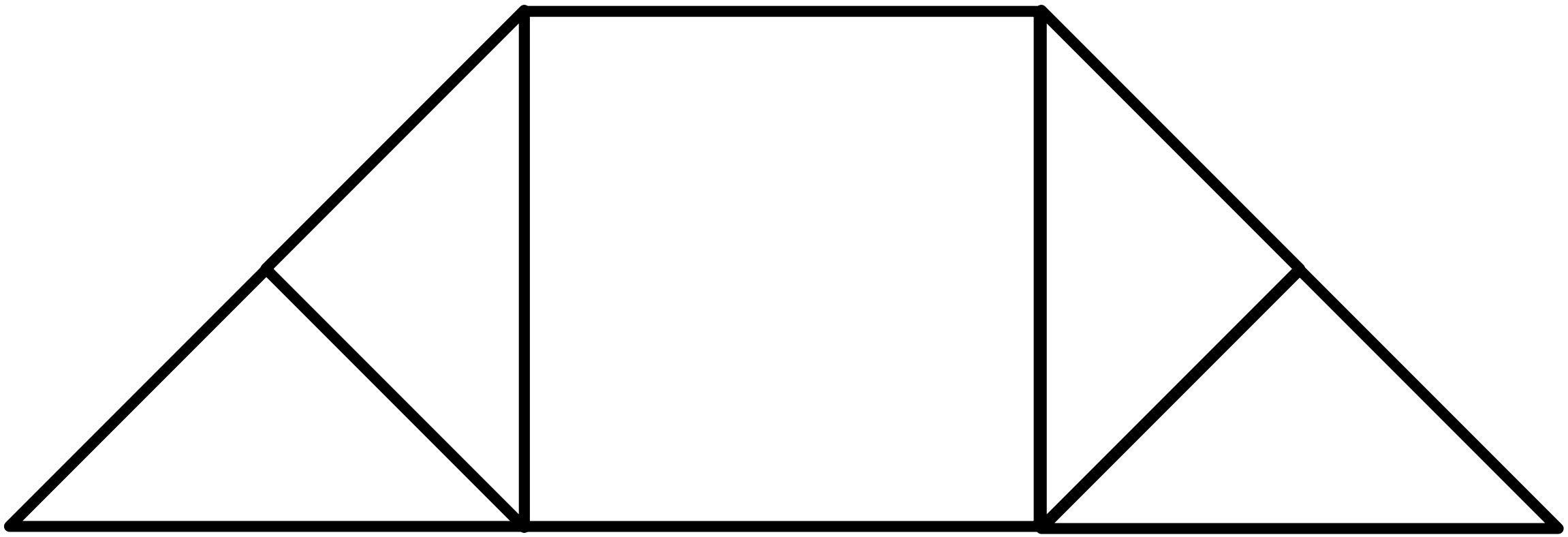
Task 47: Building shapes

Rectangle:



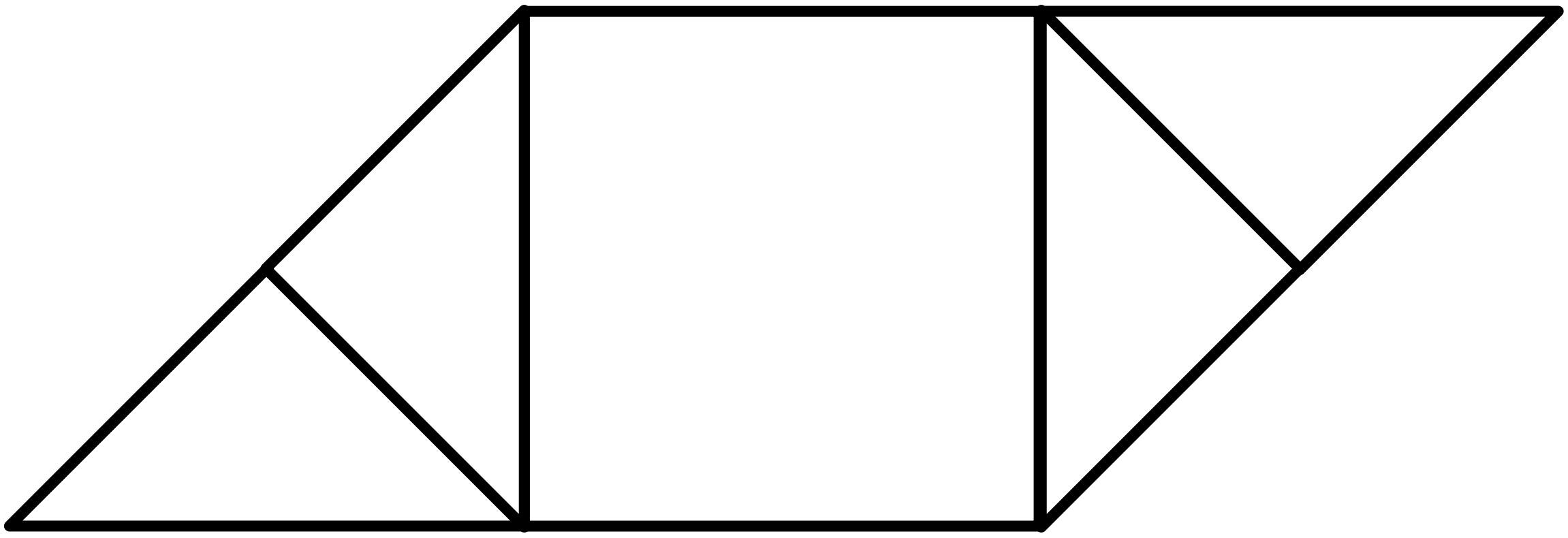
Task 47: Building shapes

Trapezium:



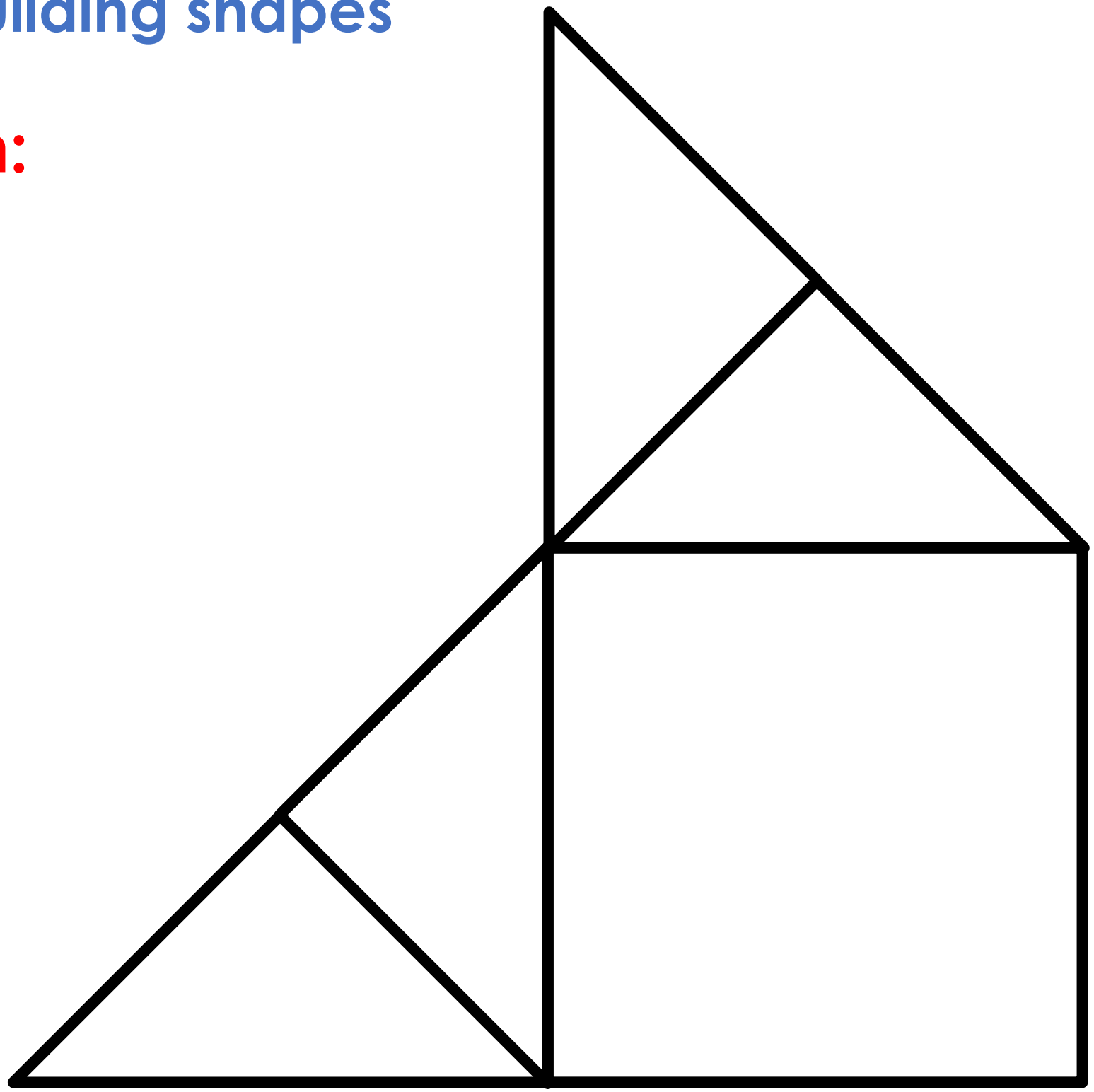
Task 47: Building shapes

Parallelogram:



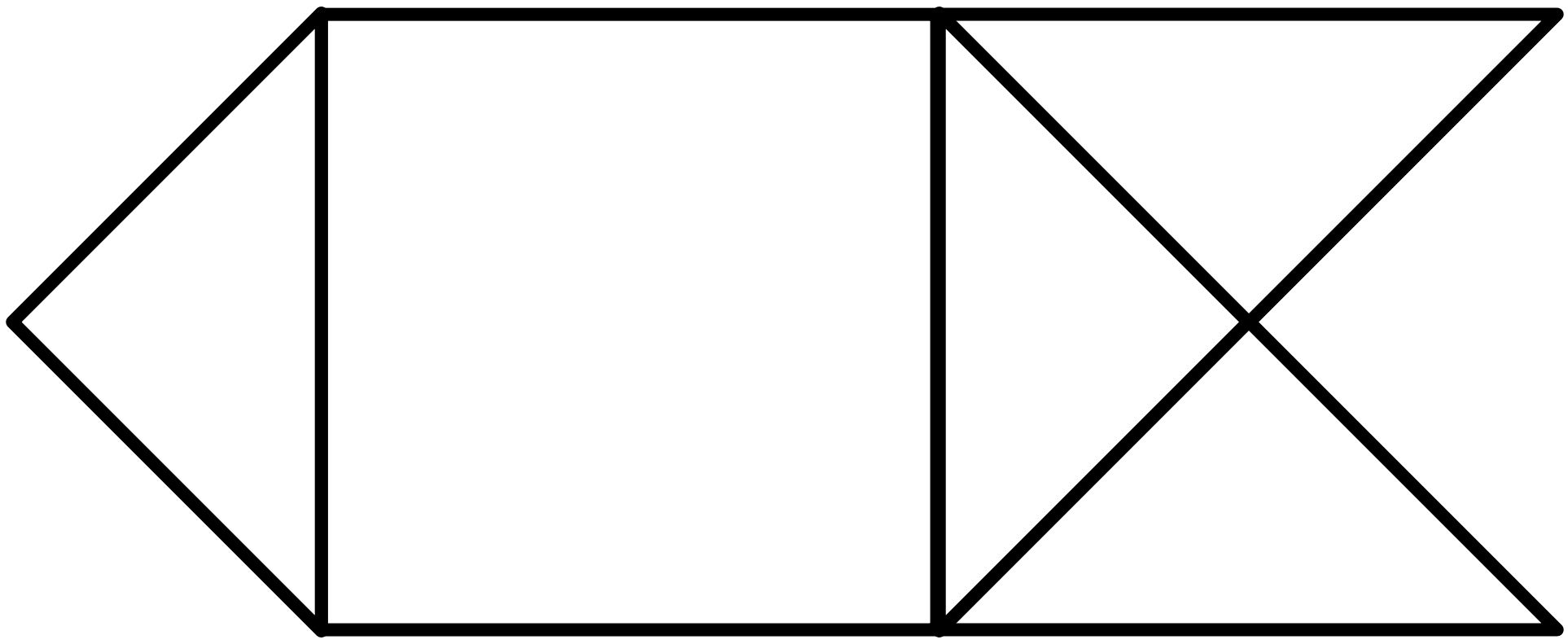
Task 47: Building shapes

Pentagon:



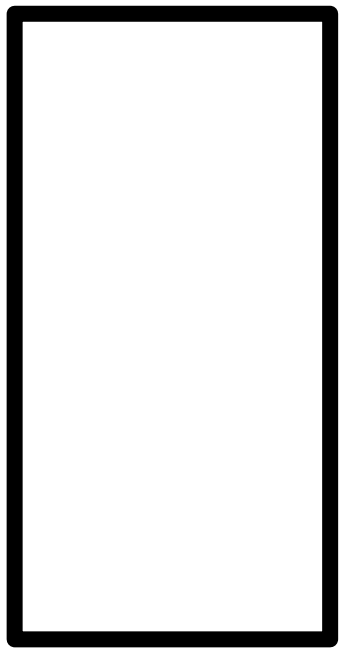
Task 47: Building shapes

Hexagon:

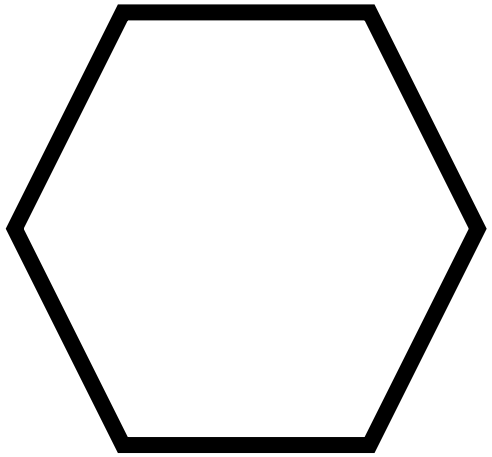


Task 48: Lines of symmetry

Rectangle:

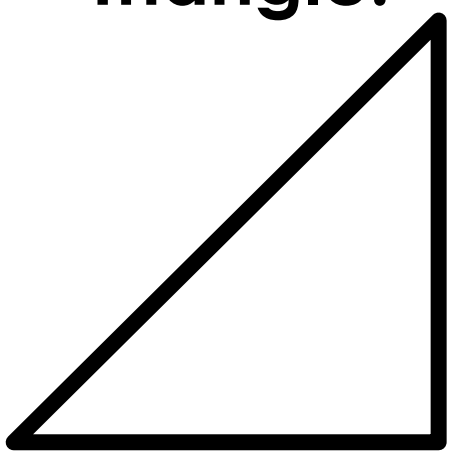


Hexagon:

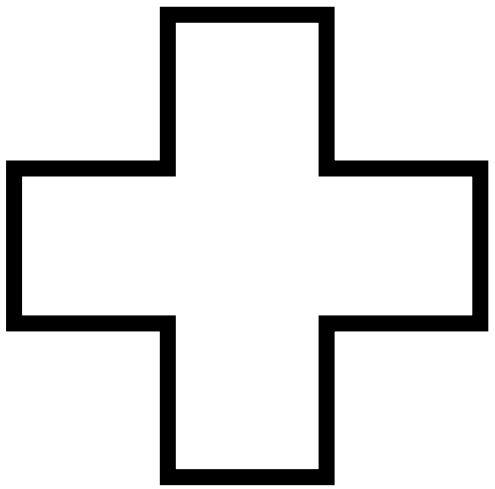


Parallelogram:

Triangle:

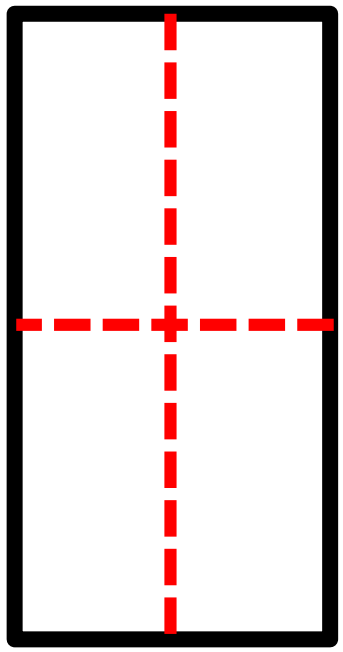


Cross:

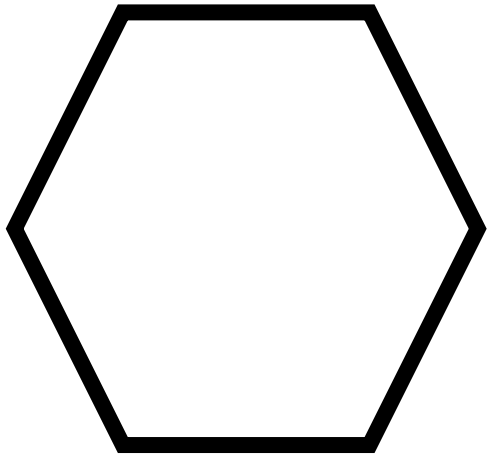


Task 48: Lines of symmetry

Rectangle: 2

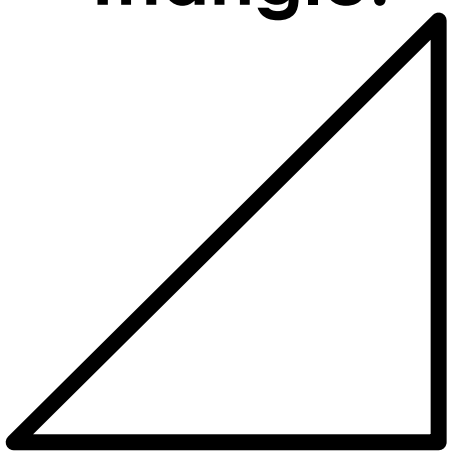


Hexagon:

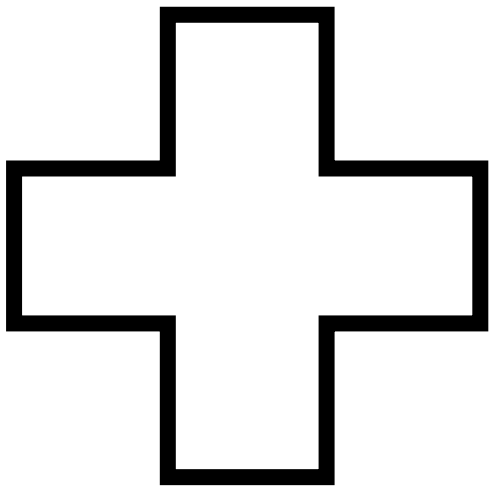


Parallelogram:

Triangle:

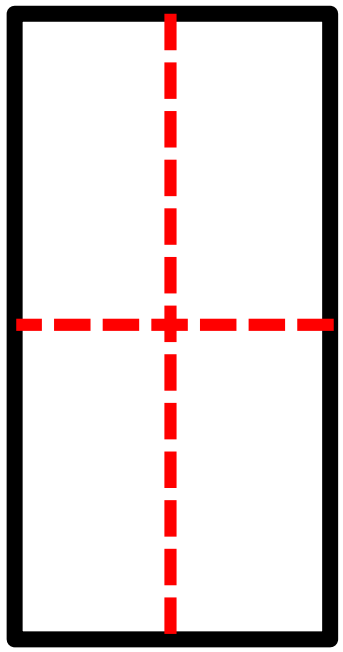


Cross:

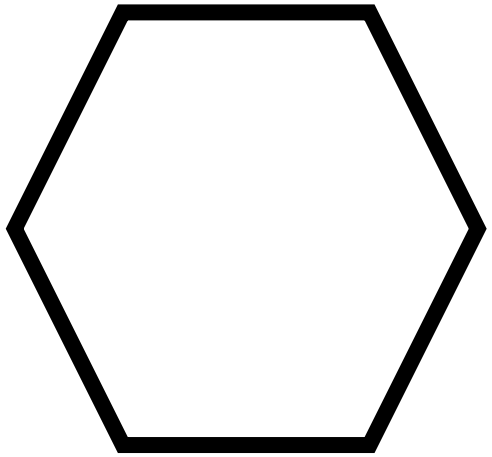


Task 48: Lines of symmetry

Rectangle: 2

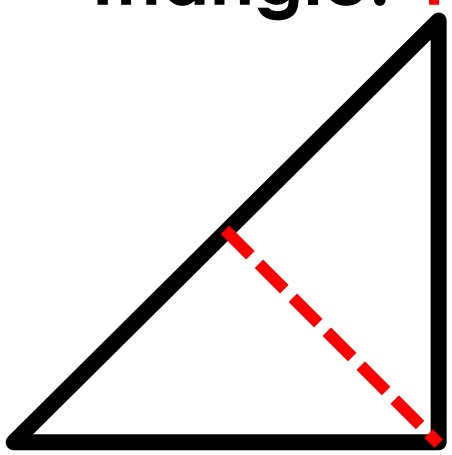


Hexagon:

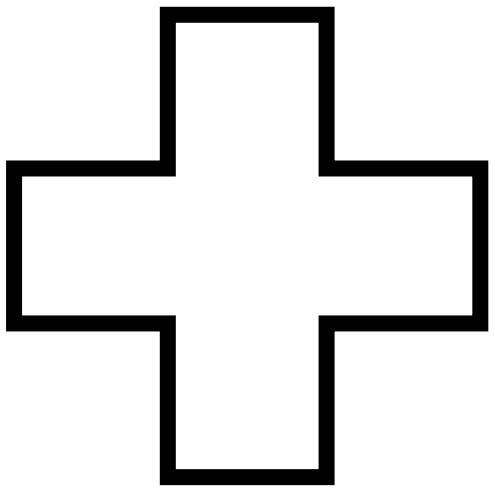


Parallelogram:

Triangle: 1

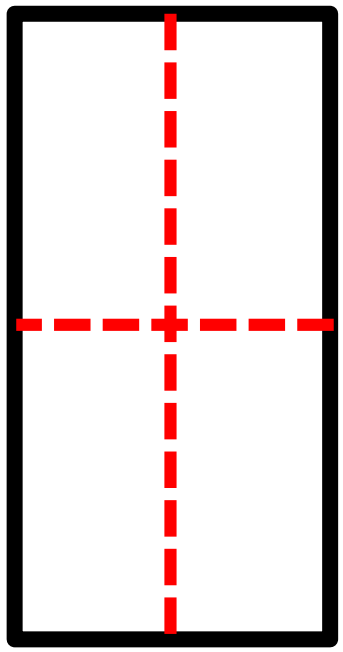


Cross:

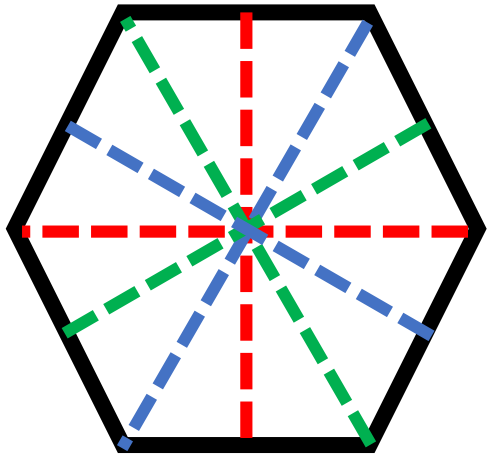


Task 48: Lines of symmetry

Rectangle: 2

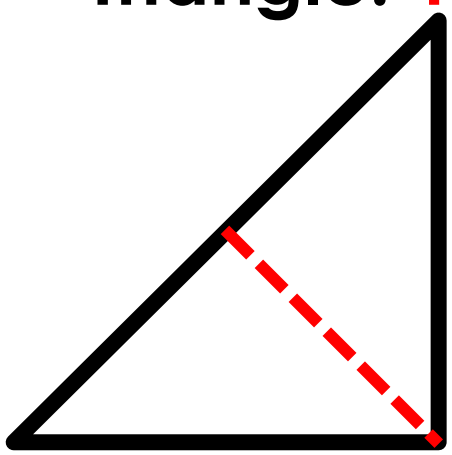


Hexagon: 6

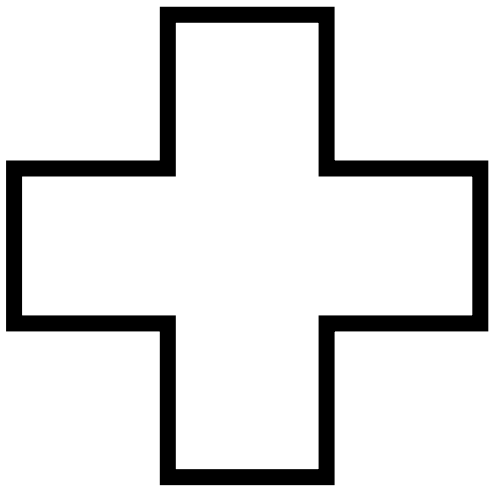


Parallelogram:

Triangle: 1

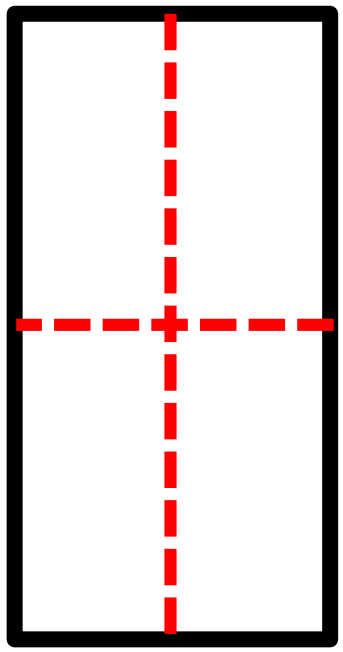


Cross:

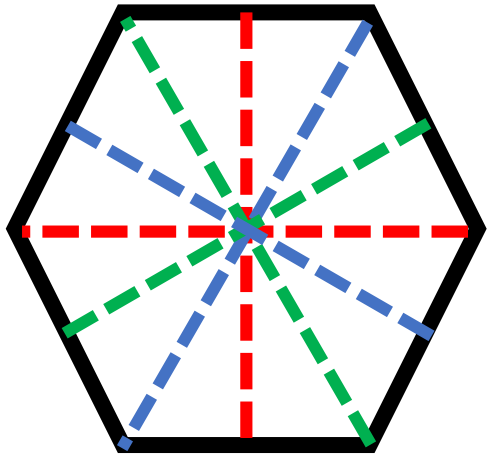


Task 48: Lines of symmetry

Rectangle: 2

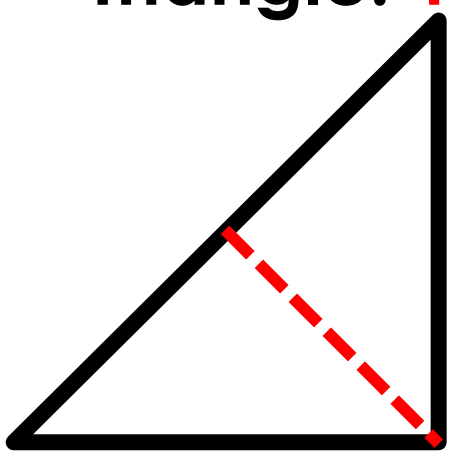


Hexagon: 6

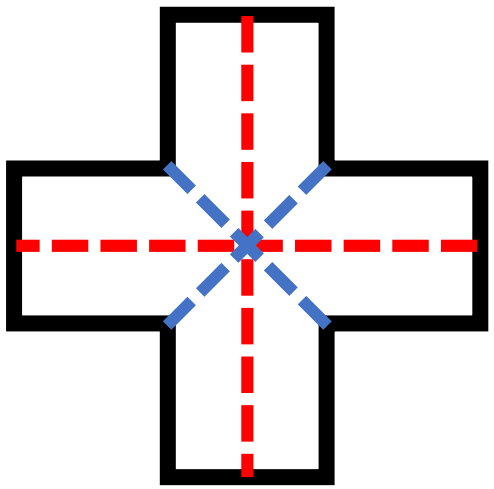


Parallelogram:

Triangle: 1

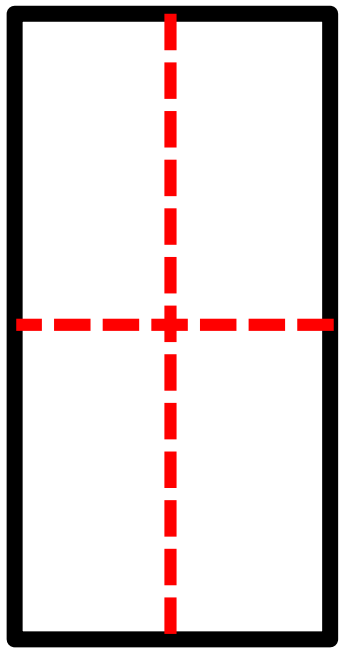


Cross: 4

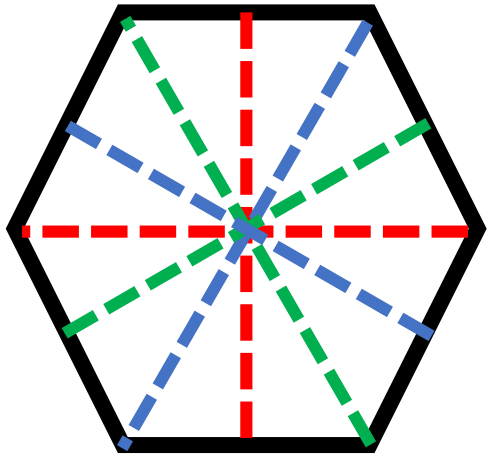


Task 48: Lines of symmetry

Rectangle: 2

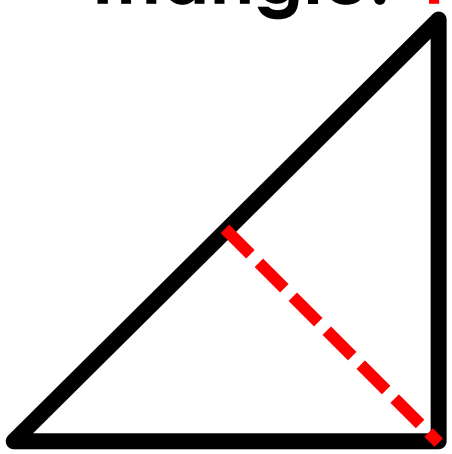


Hexagon: 6

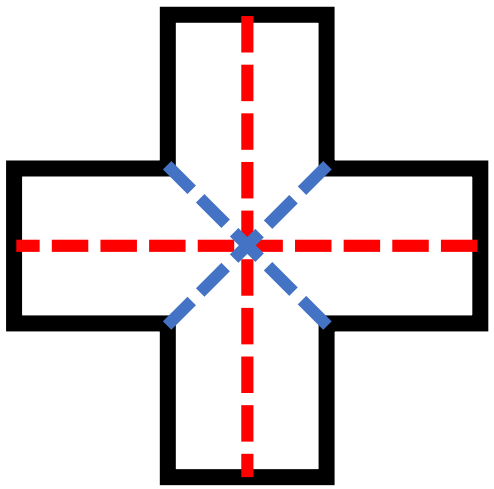


Parallelogram: 0

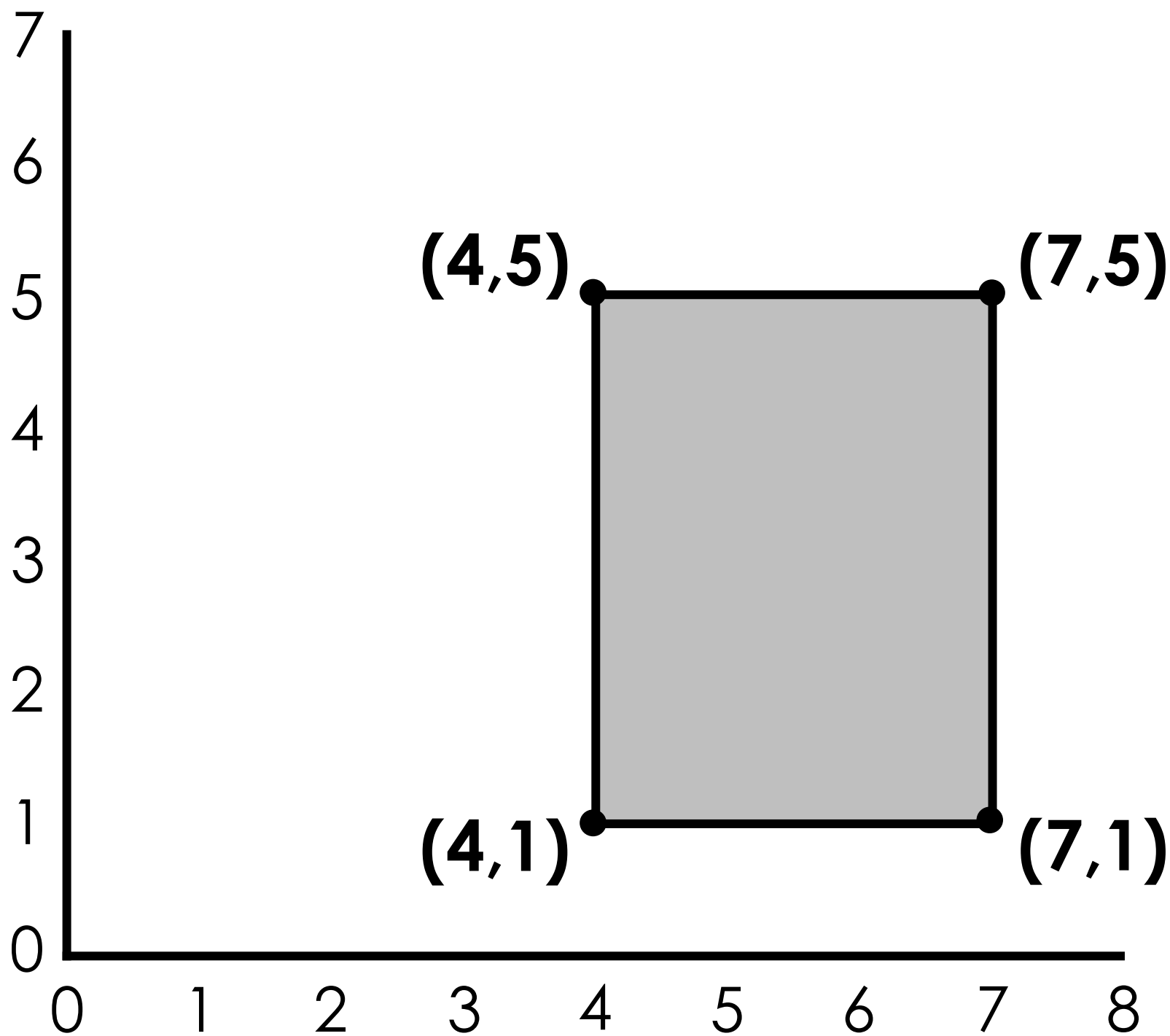
Triangle: 1



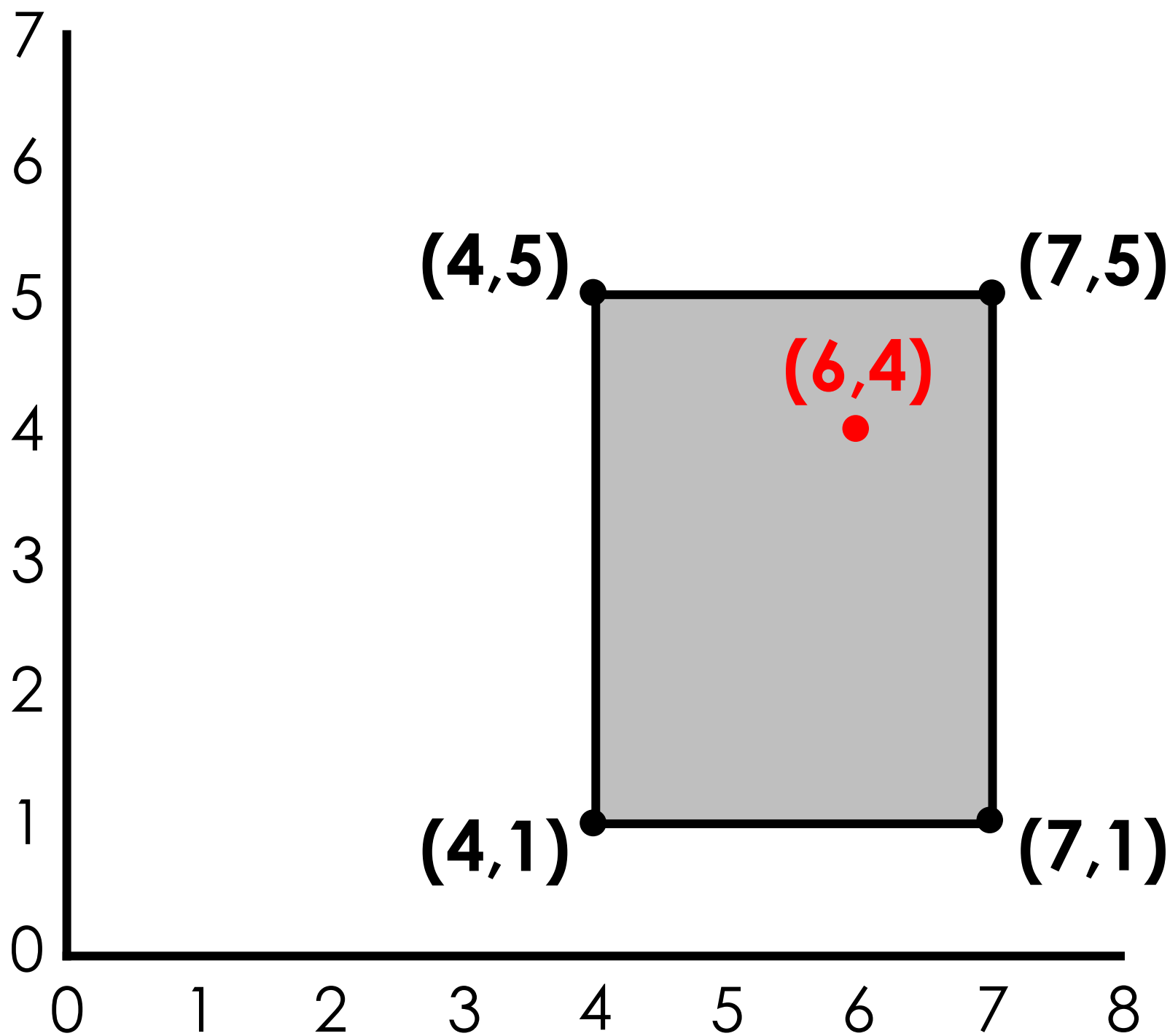
Cross: 4



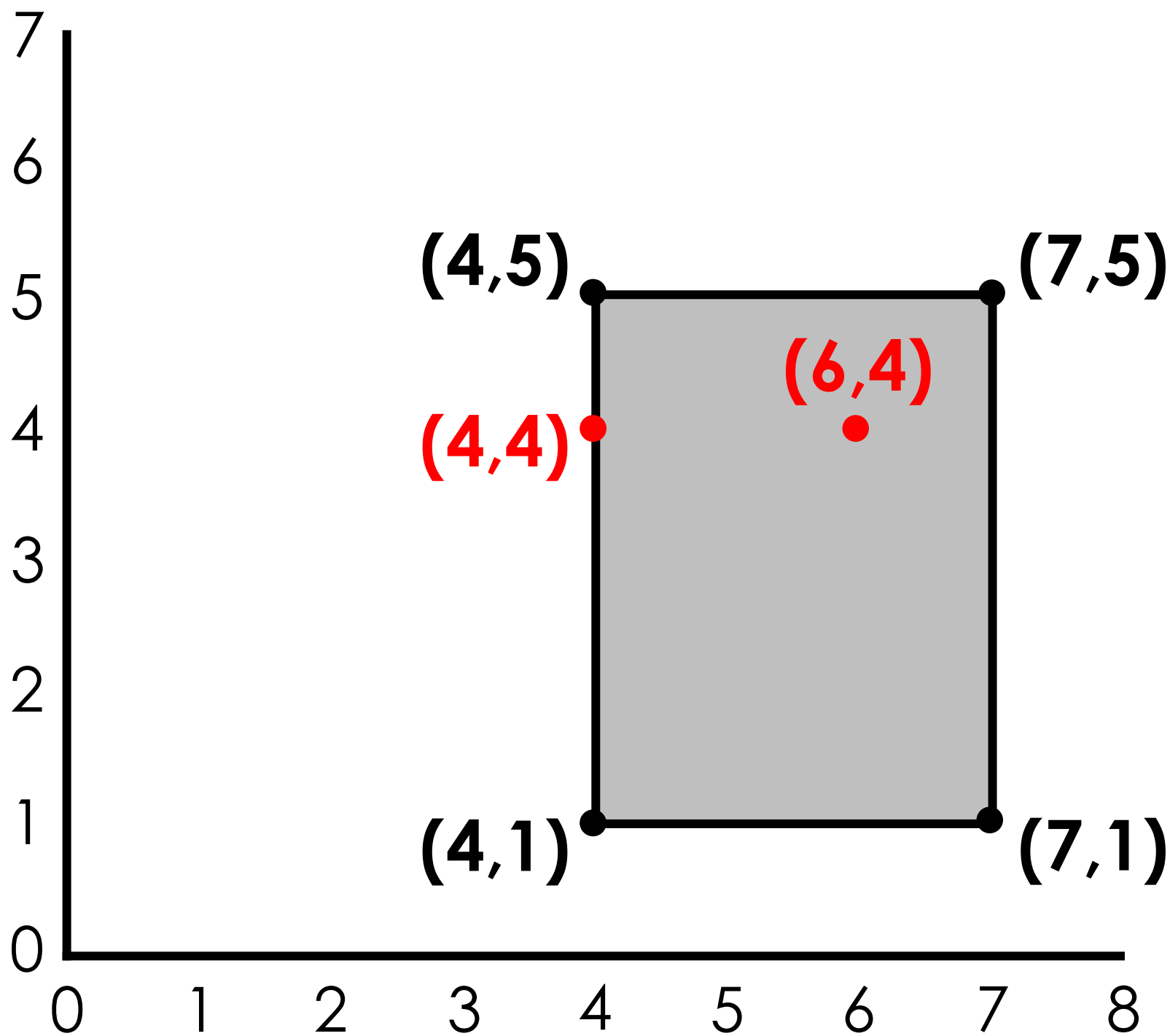
Task 49: Coordinate points



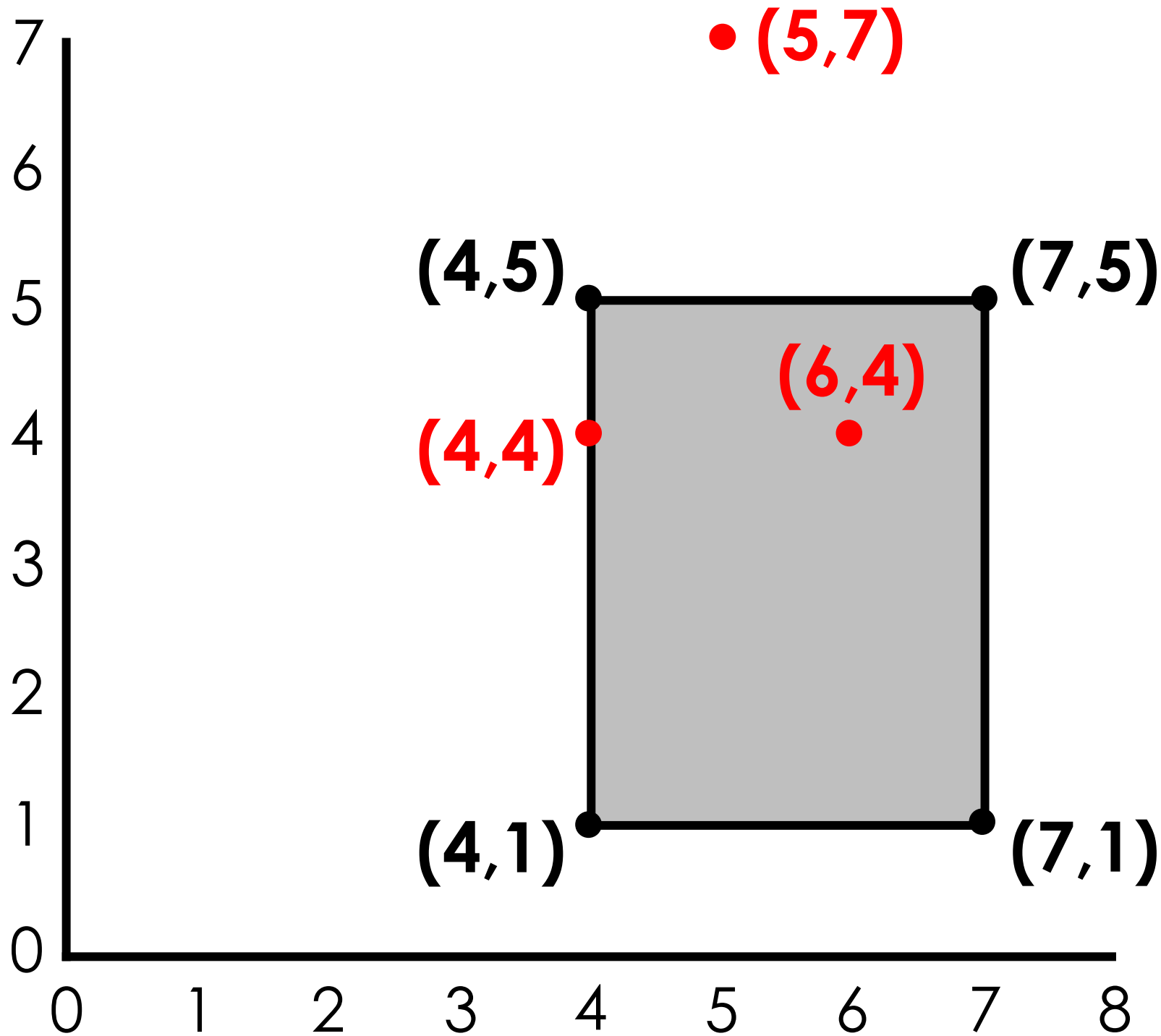
Task 49: Coordinate points



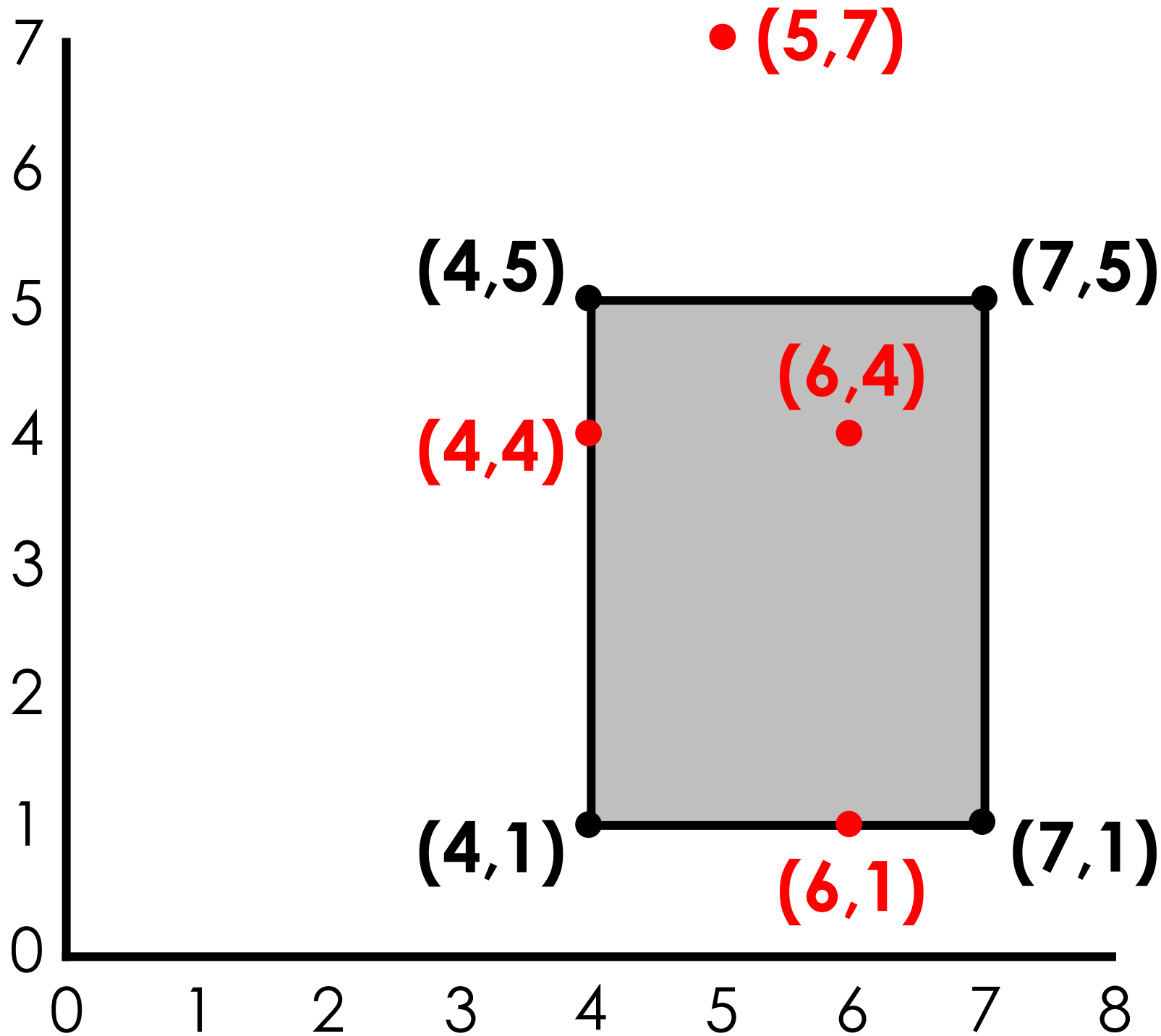
Task 49: Coordinate points



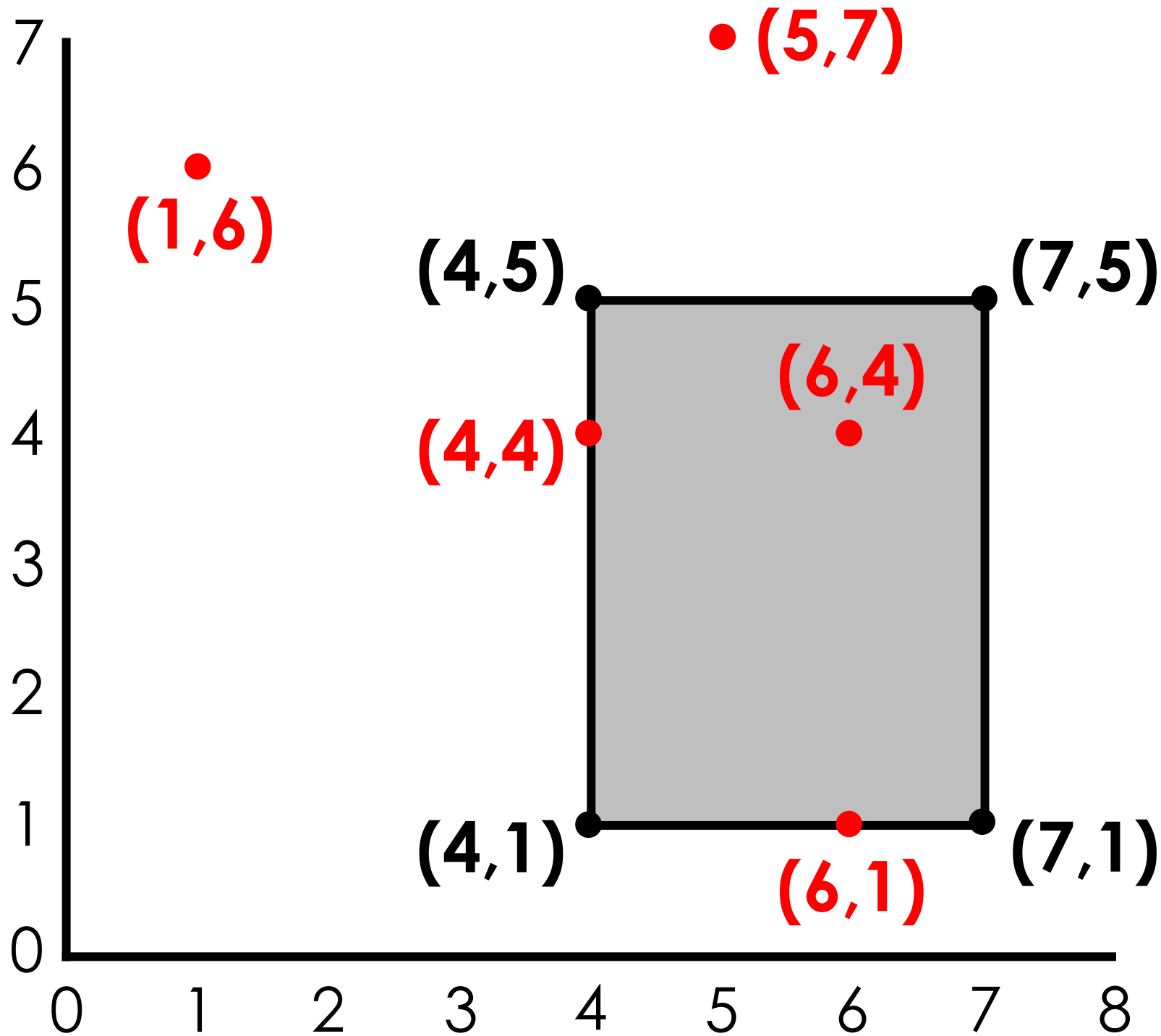
Task 49: Coordinate points



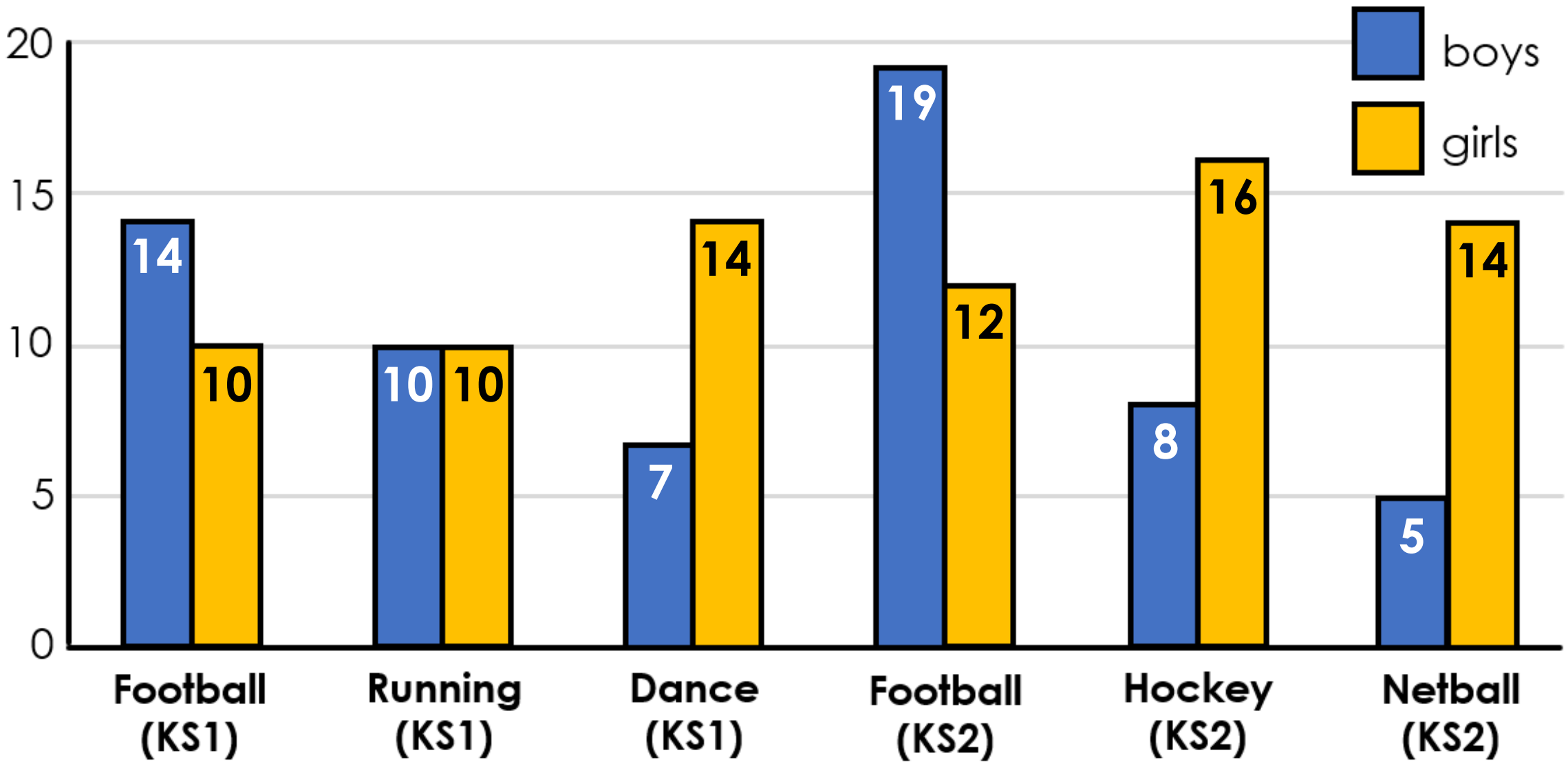
Task 49: Coordinate points



Task 49: Coordinate points

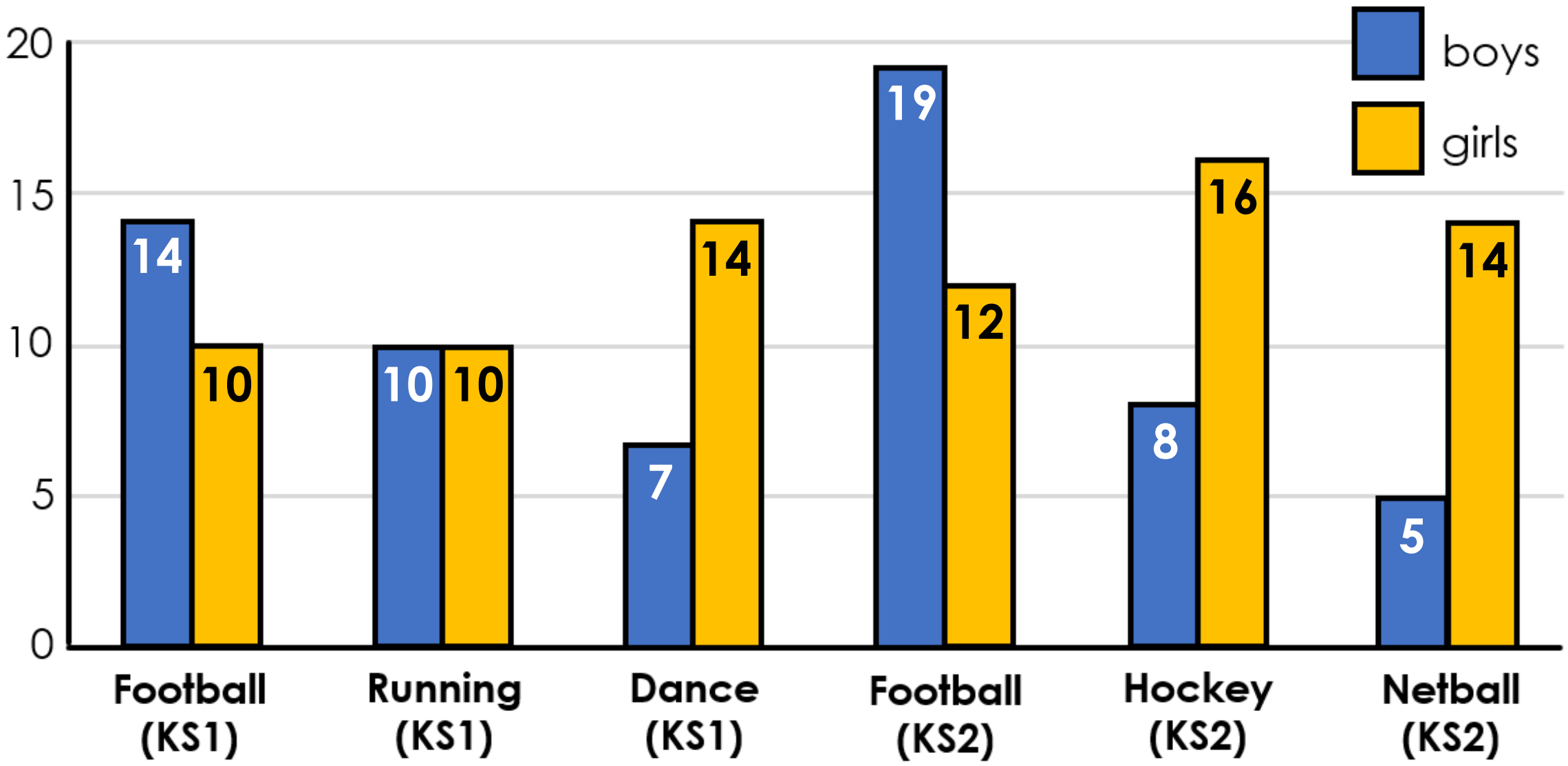


Task 50: After-school clubs



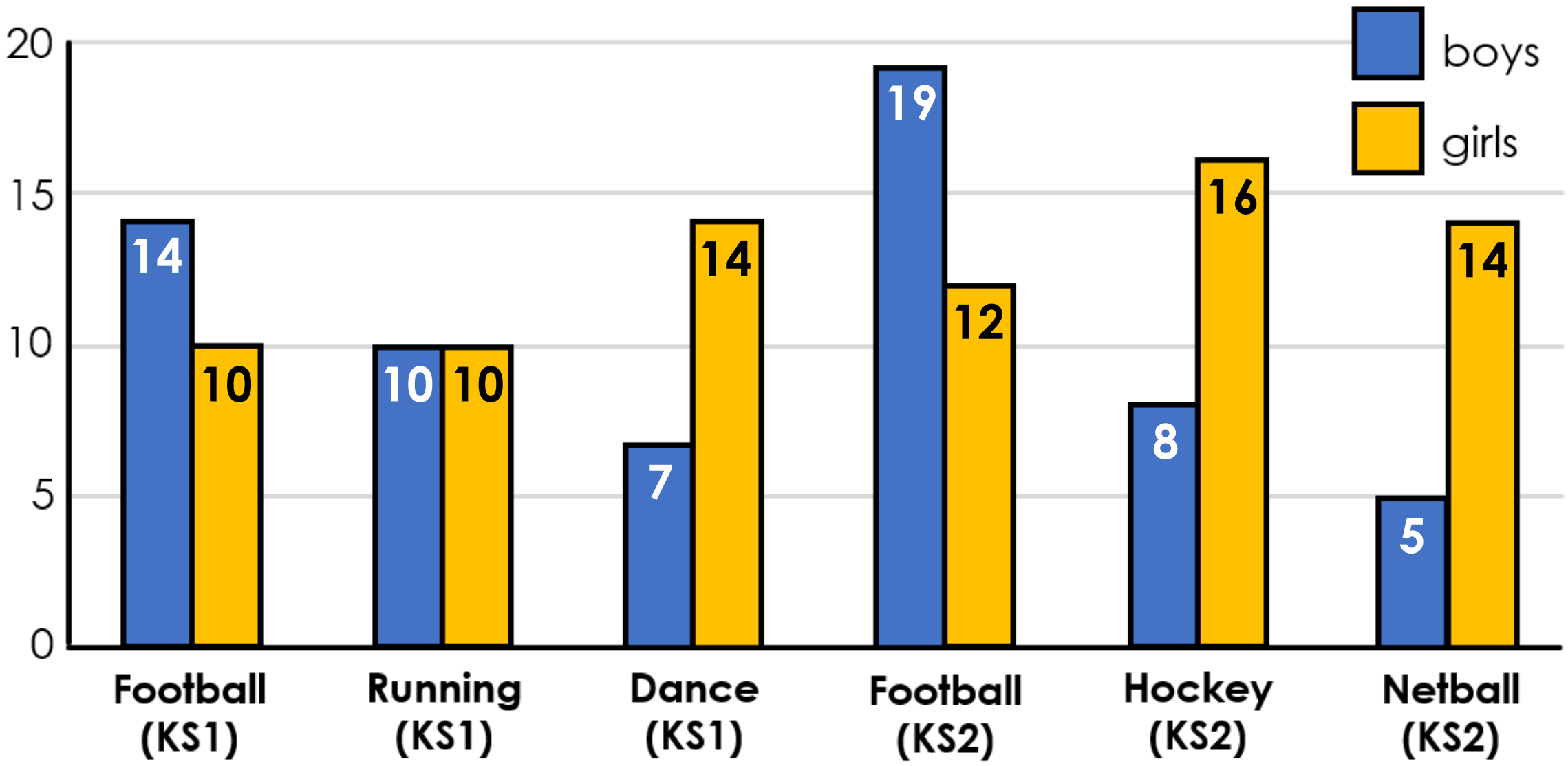
Task 50: After-school clubs

In total 65 children at KS1 clubs. There are 56 children in KS1 (some children attend more than one club).



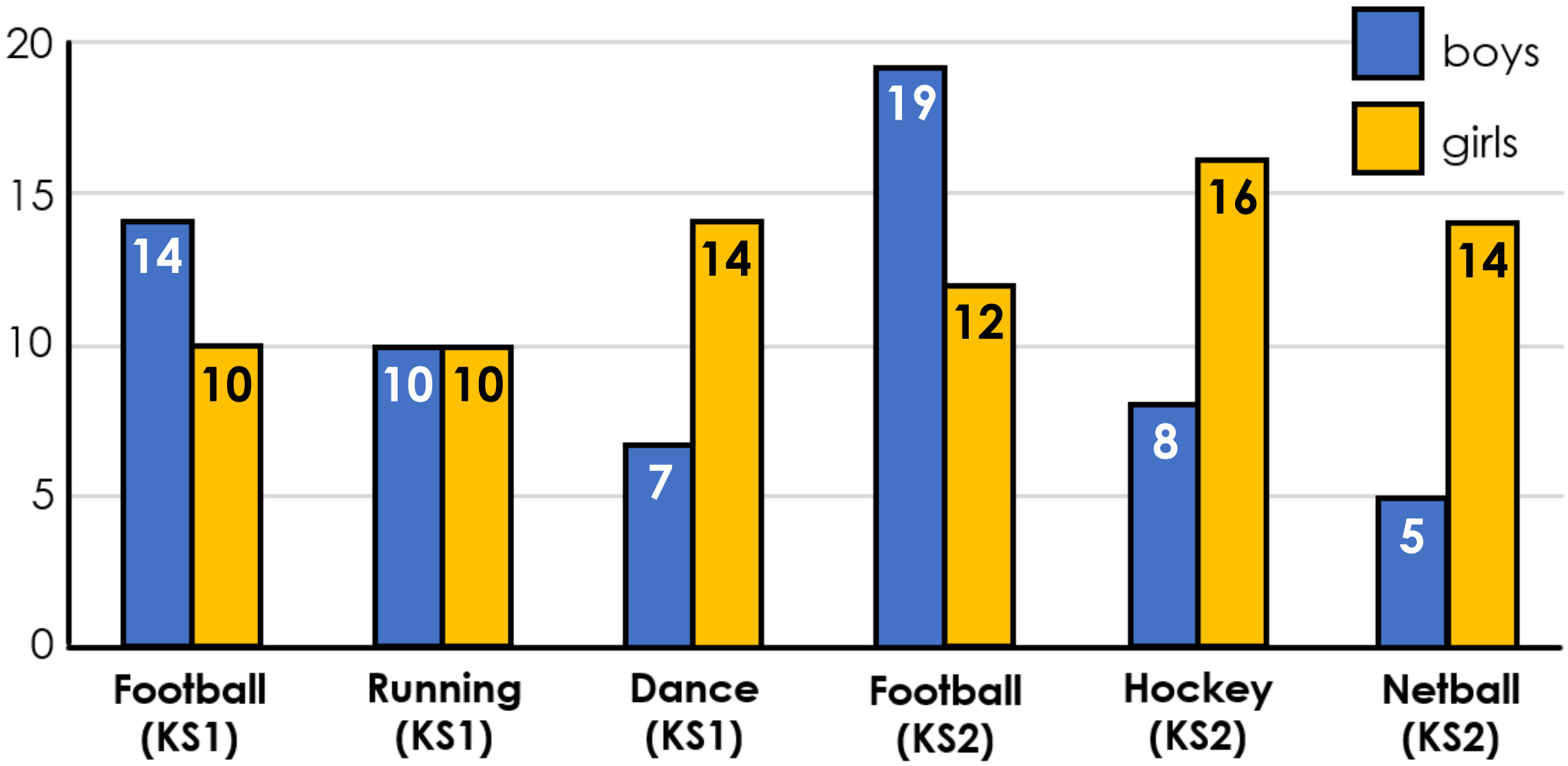
Task 50: After-school clubs

In total 74 children at KS2 clubs. There are 119 children in KS2.



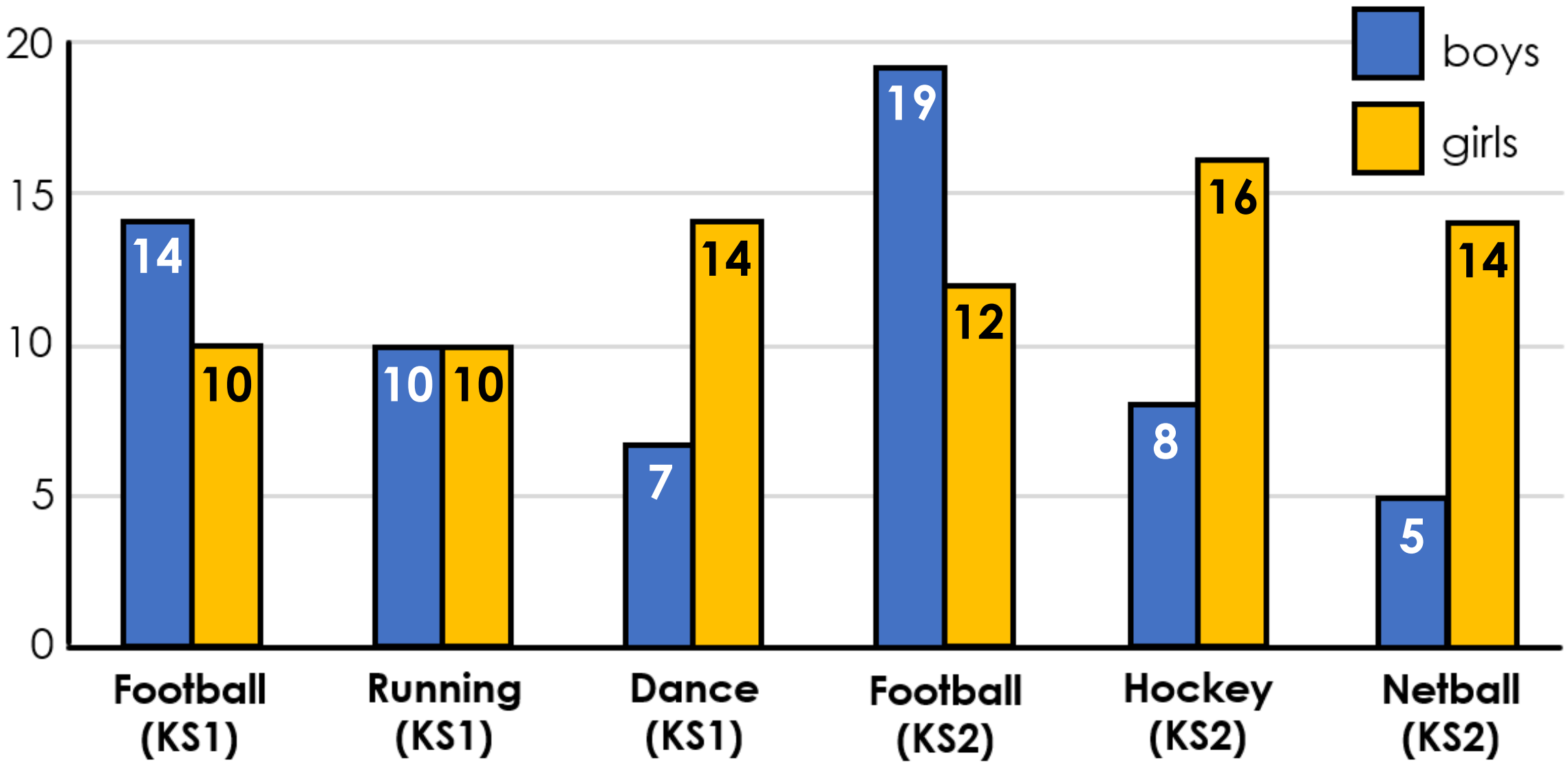
Task 50: After-school clubs

KS2 clubs: 32 boys, 42 girls.



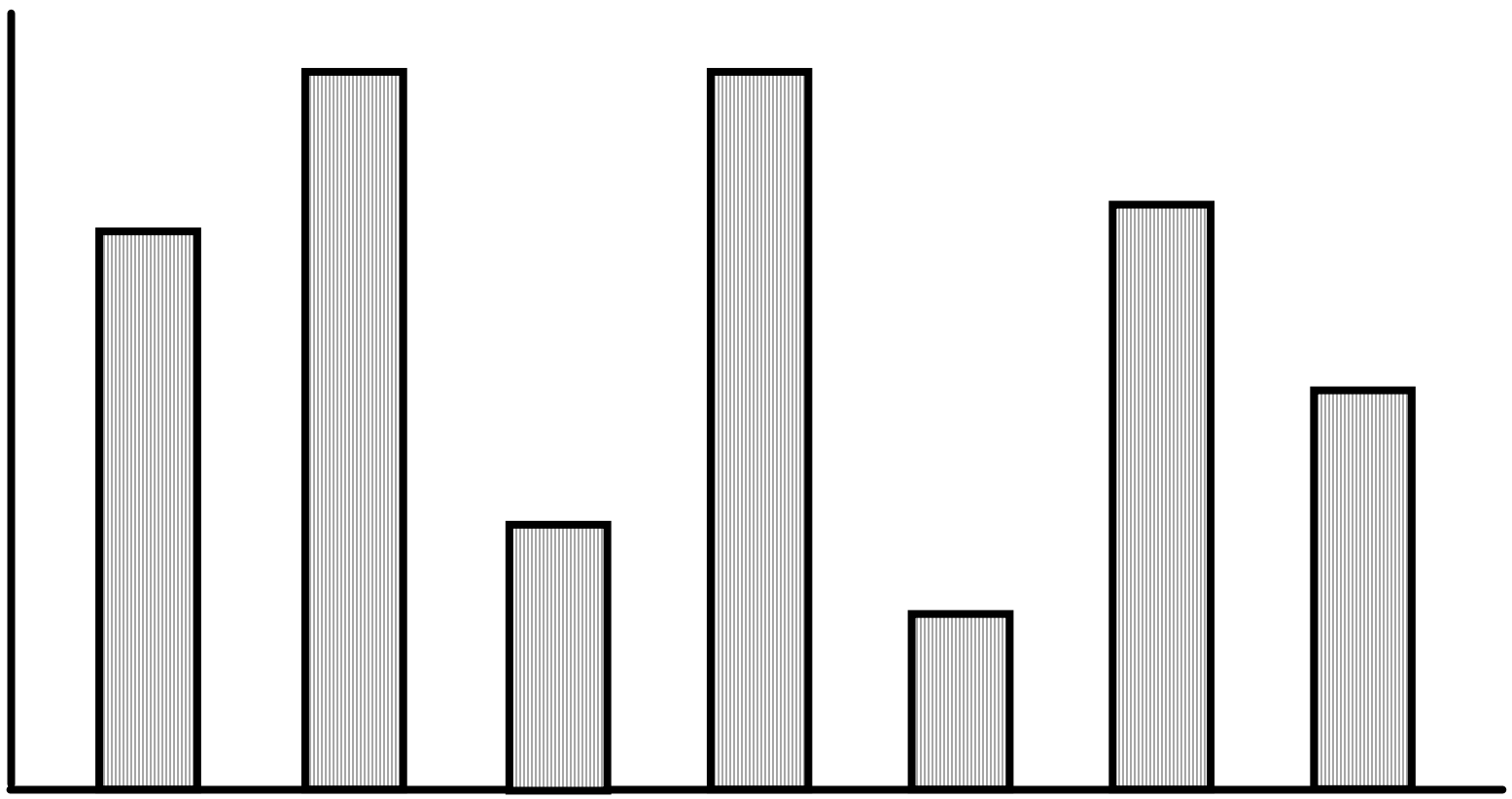
Task 50: After-school clubs

KS2 clubs are all outdoor team sports.



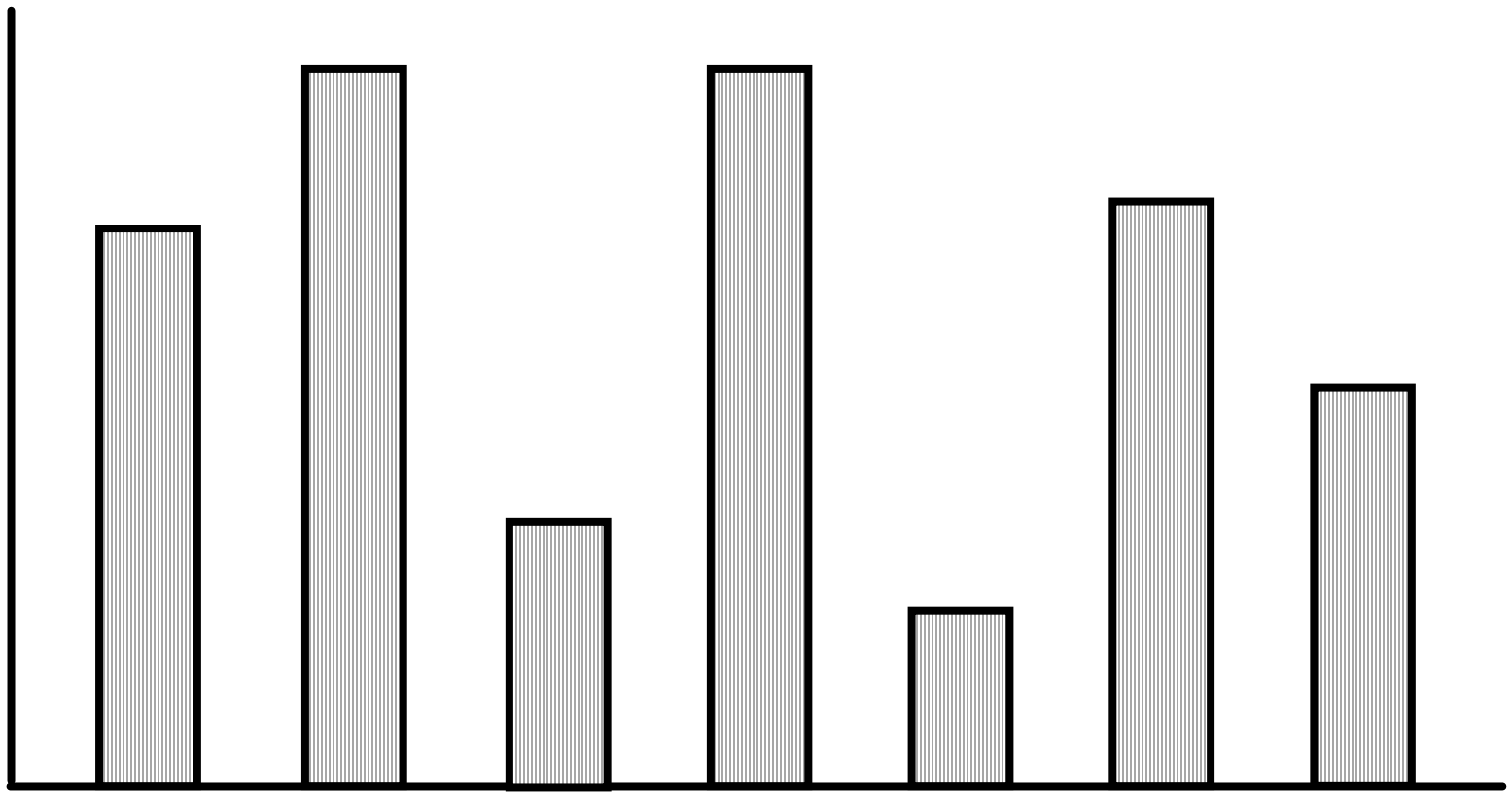
Task 51: Different graph types

Graph to show favourite football teams for children in class



Task 51: Different graph types

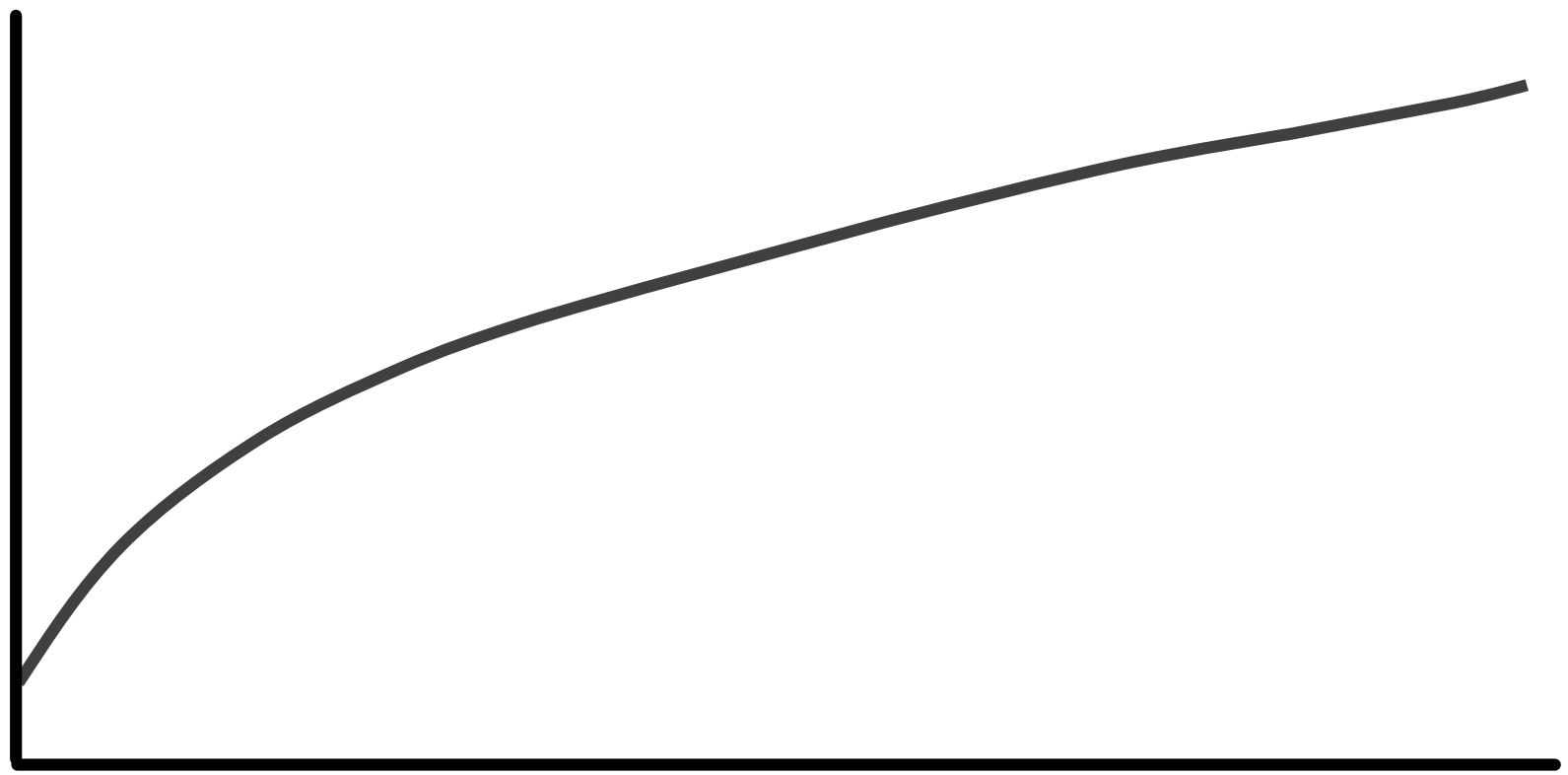
Graph to show favourite football teams for children in class



No pattern to the size of the bars, seven different football teams supported by the children in the class.

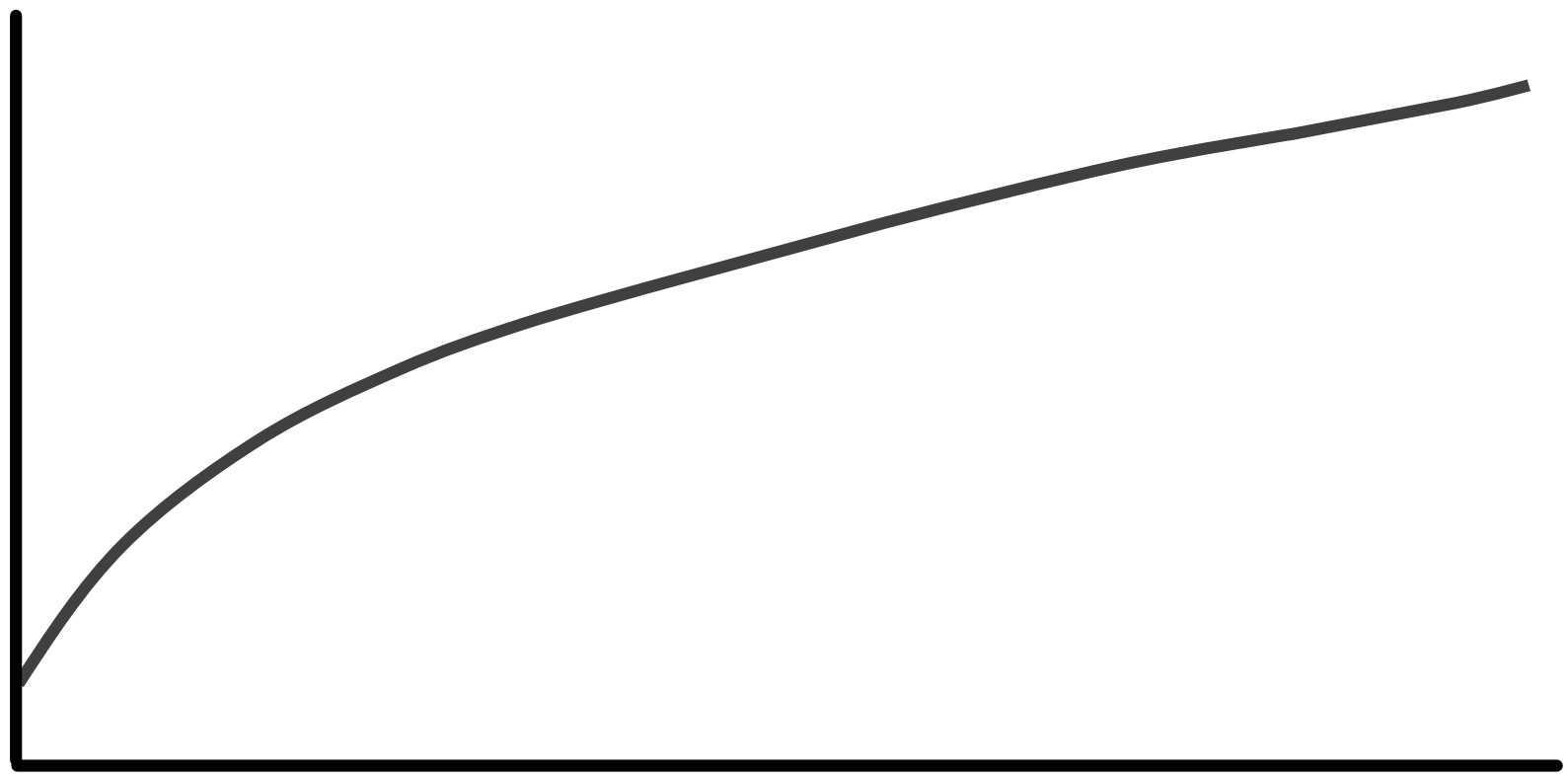
Task 51: Different graph types

Graph to show the height of a child since birth



Task 51: Different graph types

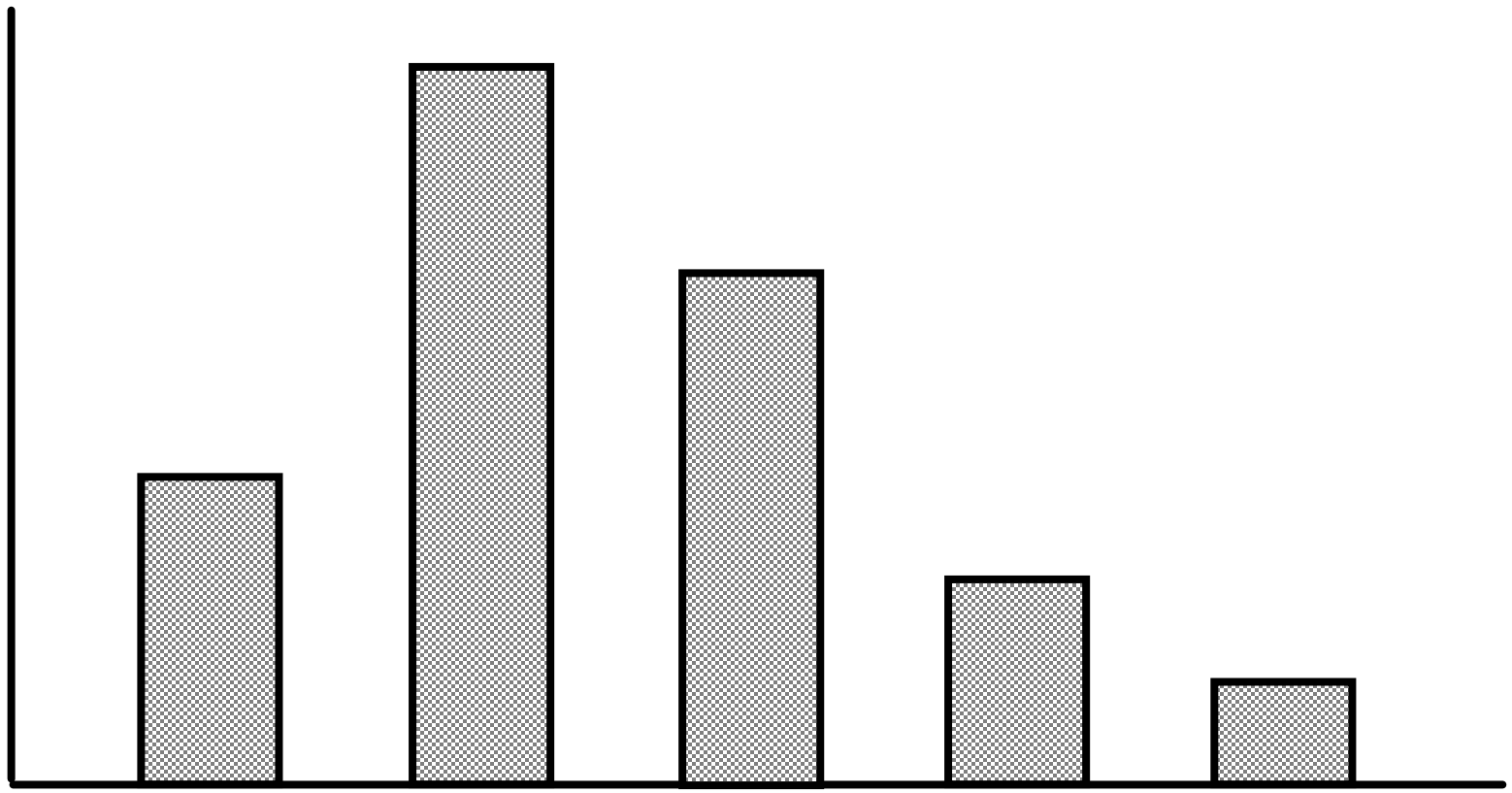
Graph to show the height of a child since birth



Line graph as height changes gradually. Height increases steadily so line gets gradually higher.

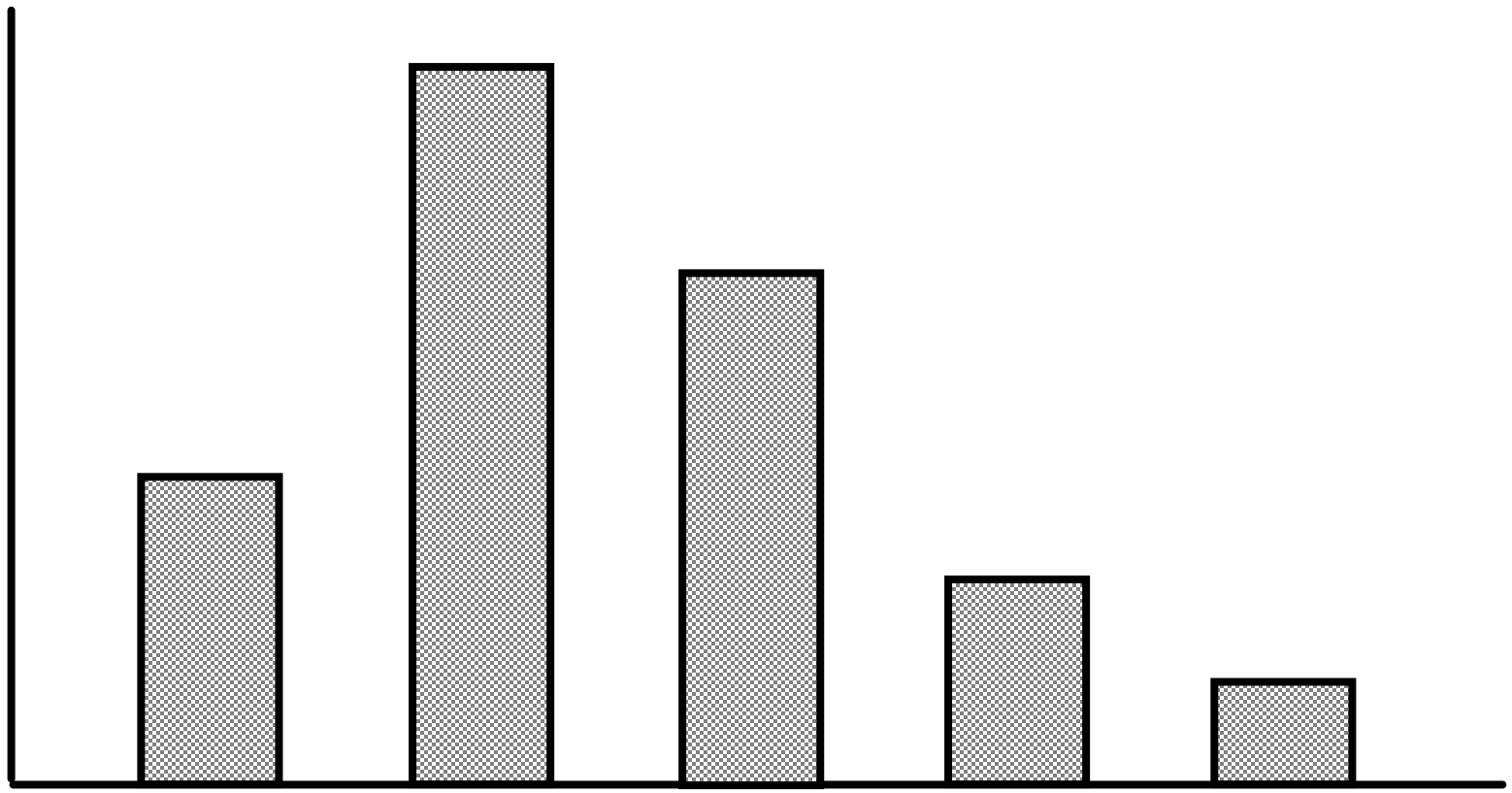
Task 51: Different graph types

Graph to show number of brothers or sisters for each child in the class



Task 51: Different graph types

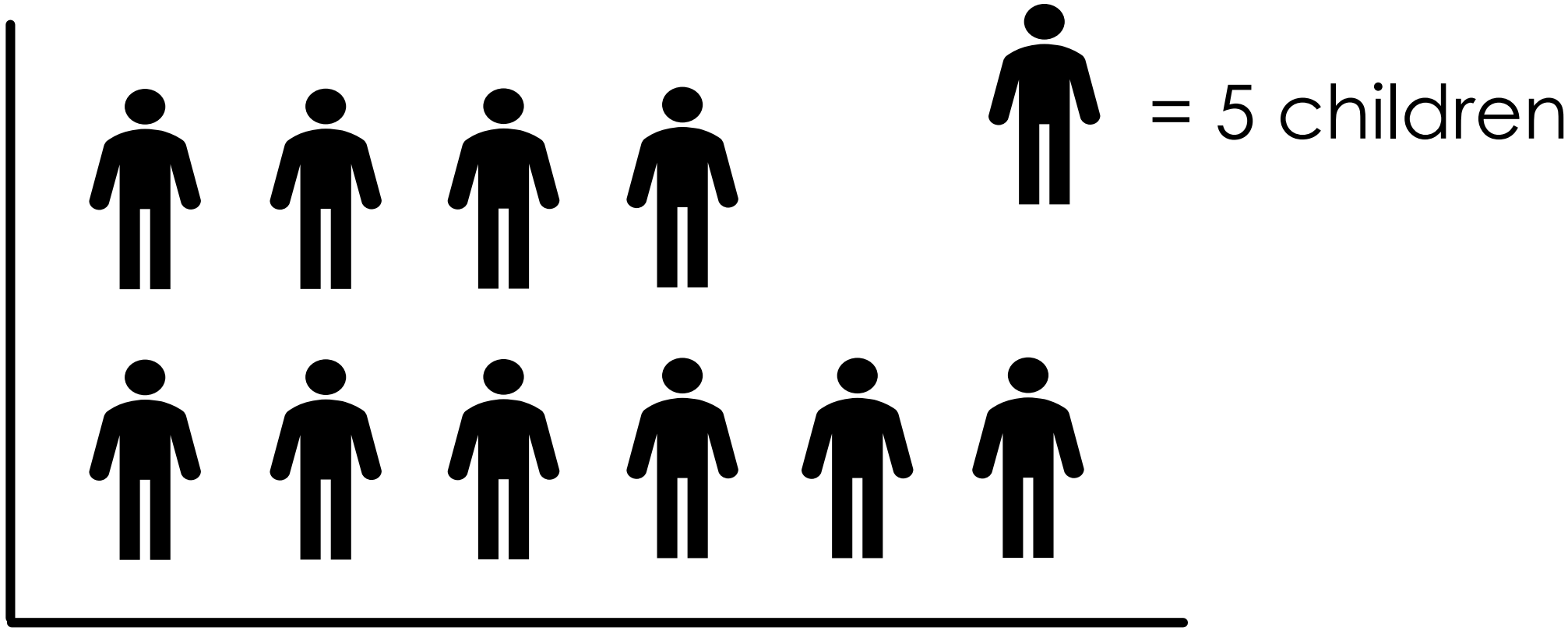
Graph to show number of brothers or sisters for each child in the class



Bar graph as there are no 'in between' values. Some children have no siblings. More children have 1 or 2 siblings than 3 or 4 siblings so the bars decrease in size.

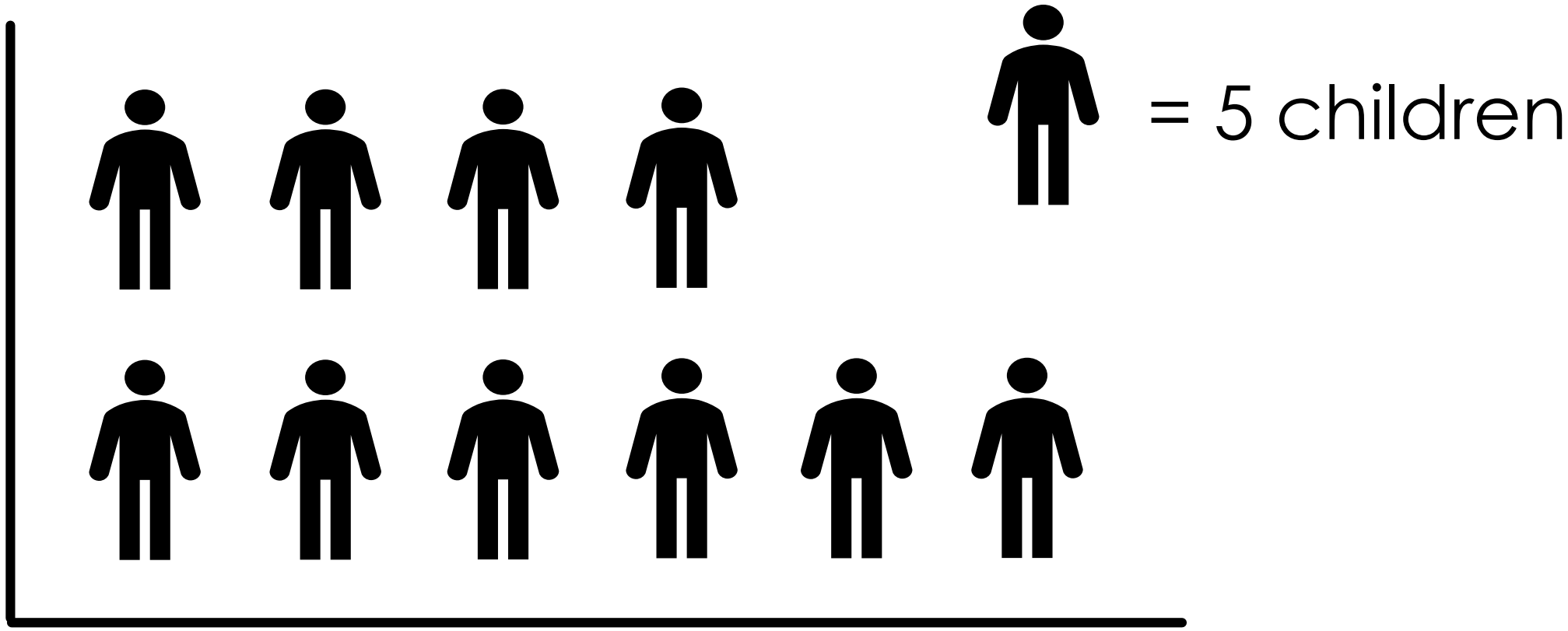
Task 51: Different graph types

Graph to show whether children are having a packed lunch or school dinners



Task 51: Different graph types

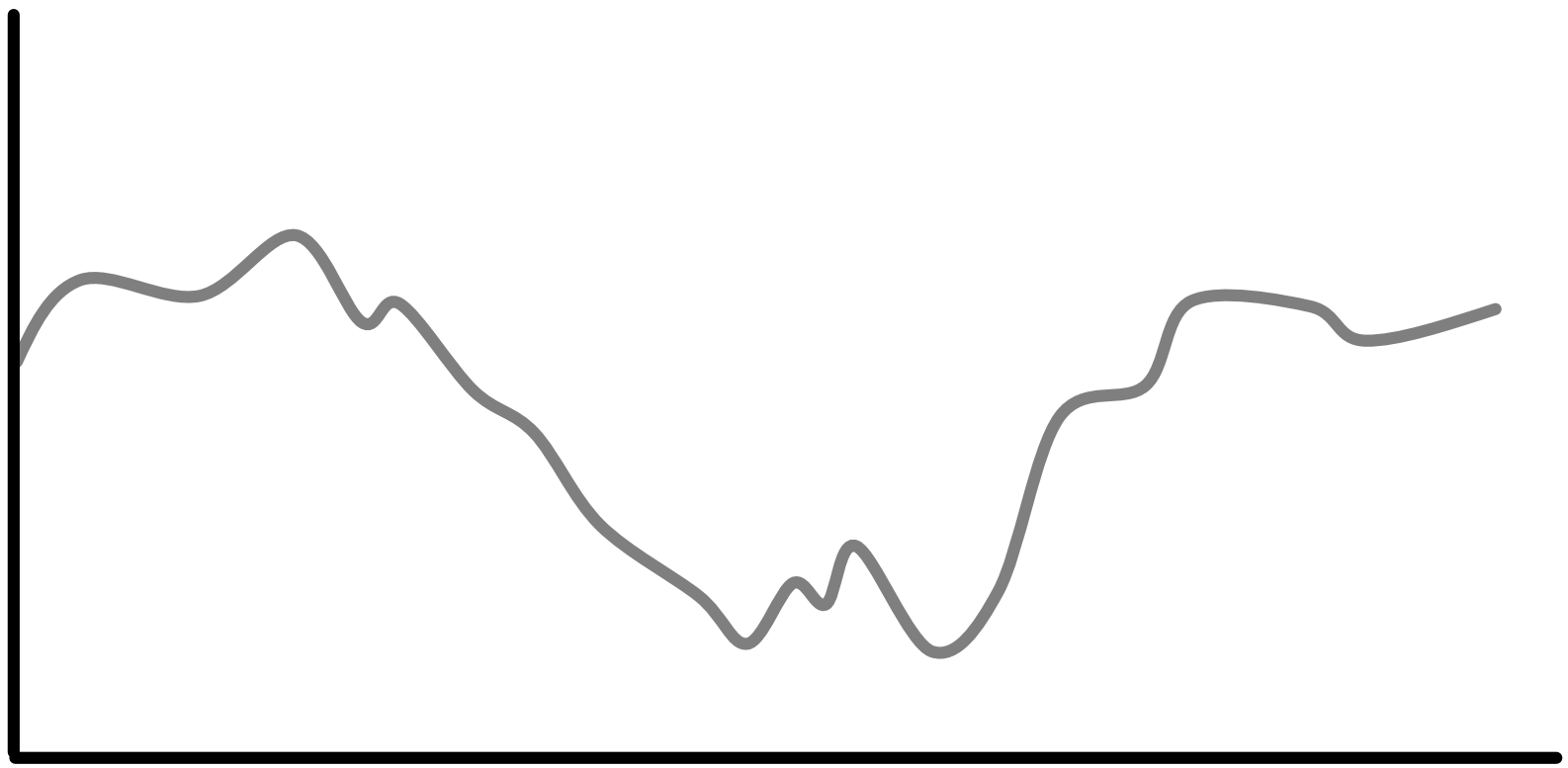
Graph to show whether children are having a packed lunch or school dinners



Only graph with just two groups, answer is in correct form – number of children.

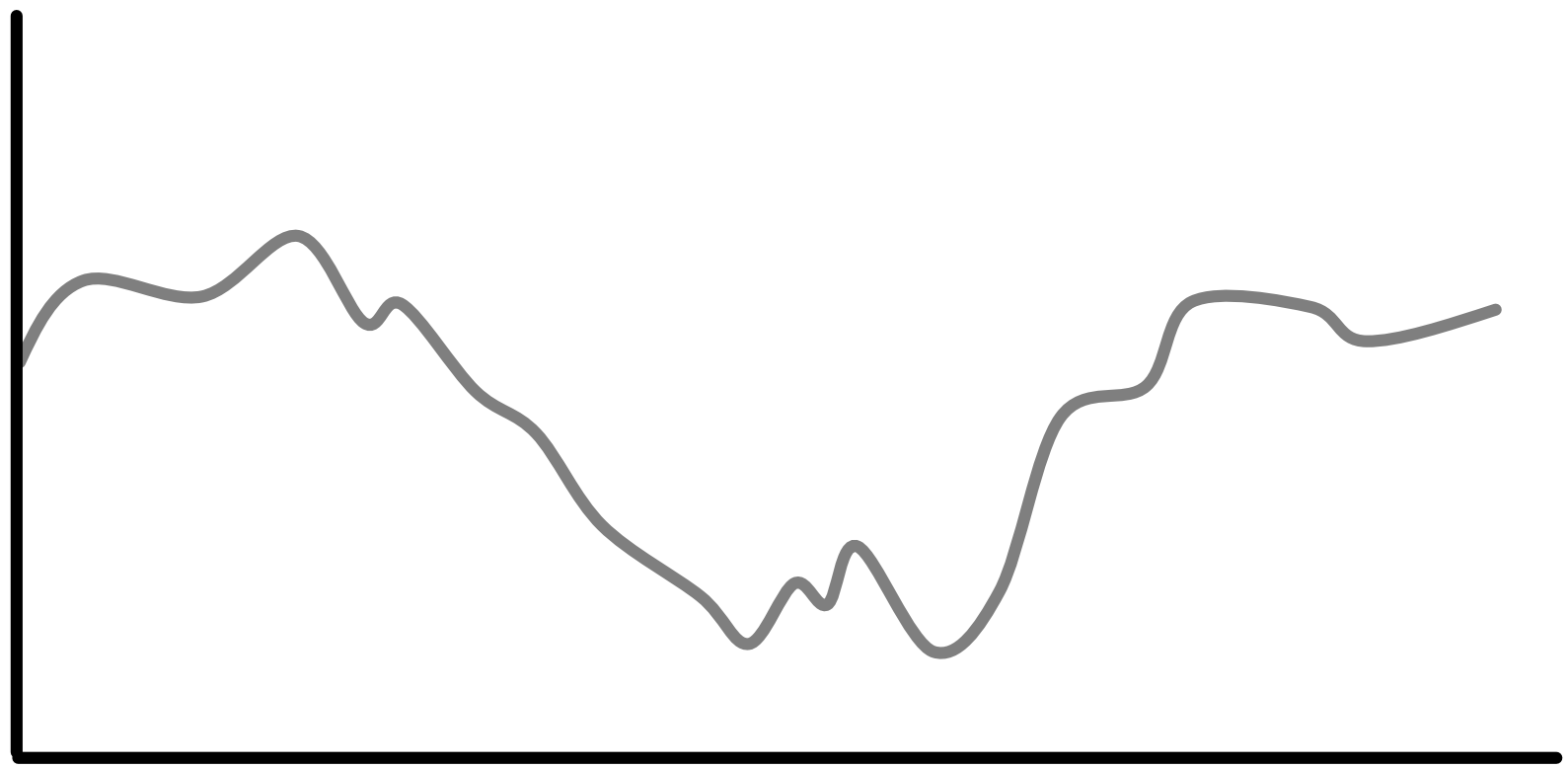
Task 51: Different graph types

Graph to show rainfall over a year



Task 51: Different graph types

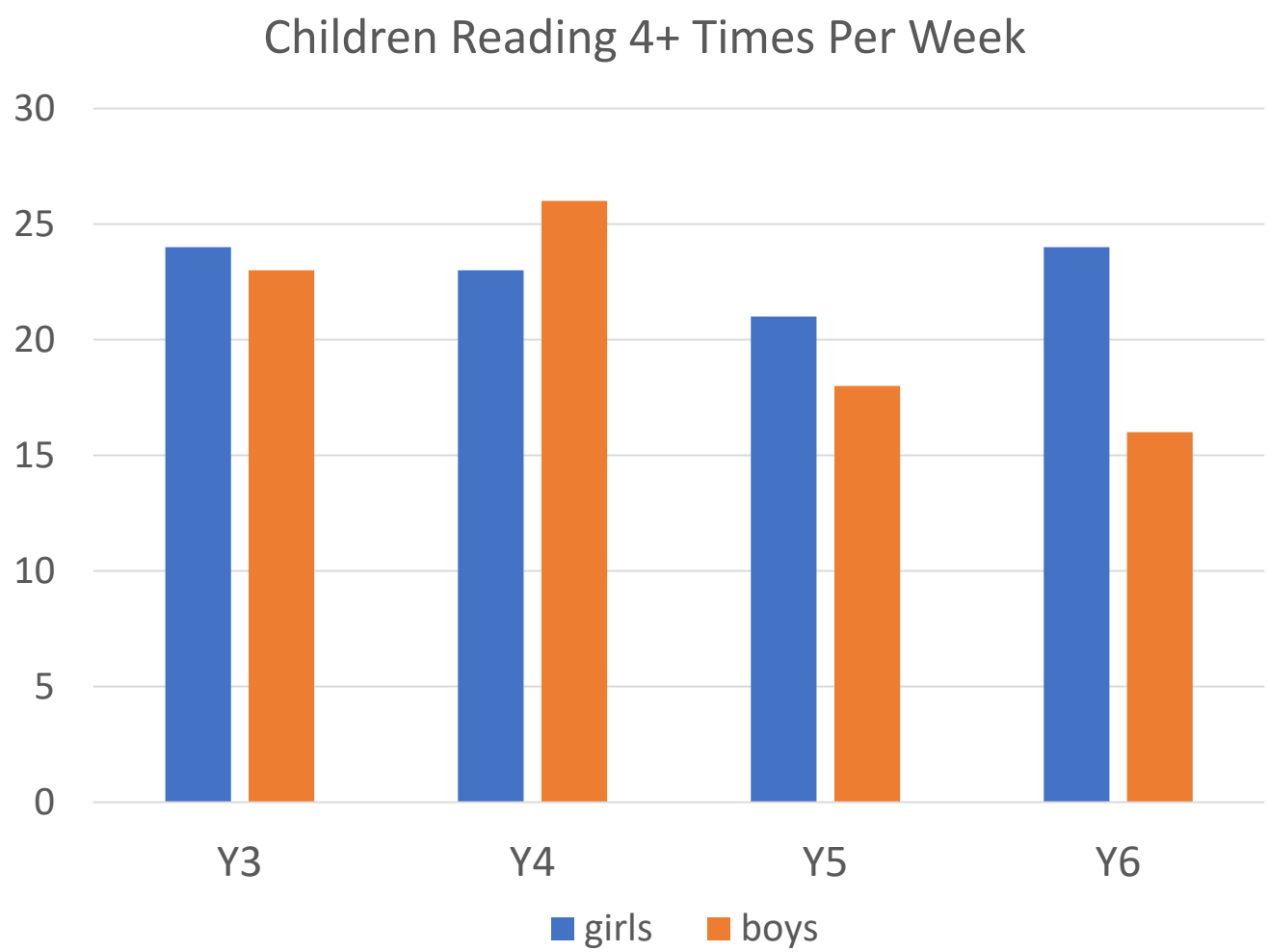
Graph to show rainfall over a year



Line graph as rainfall measured over time. Height keeps changing and lower in the middle of the year when it is summer and higher at other times.

Task 52: Making judgements

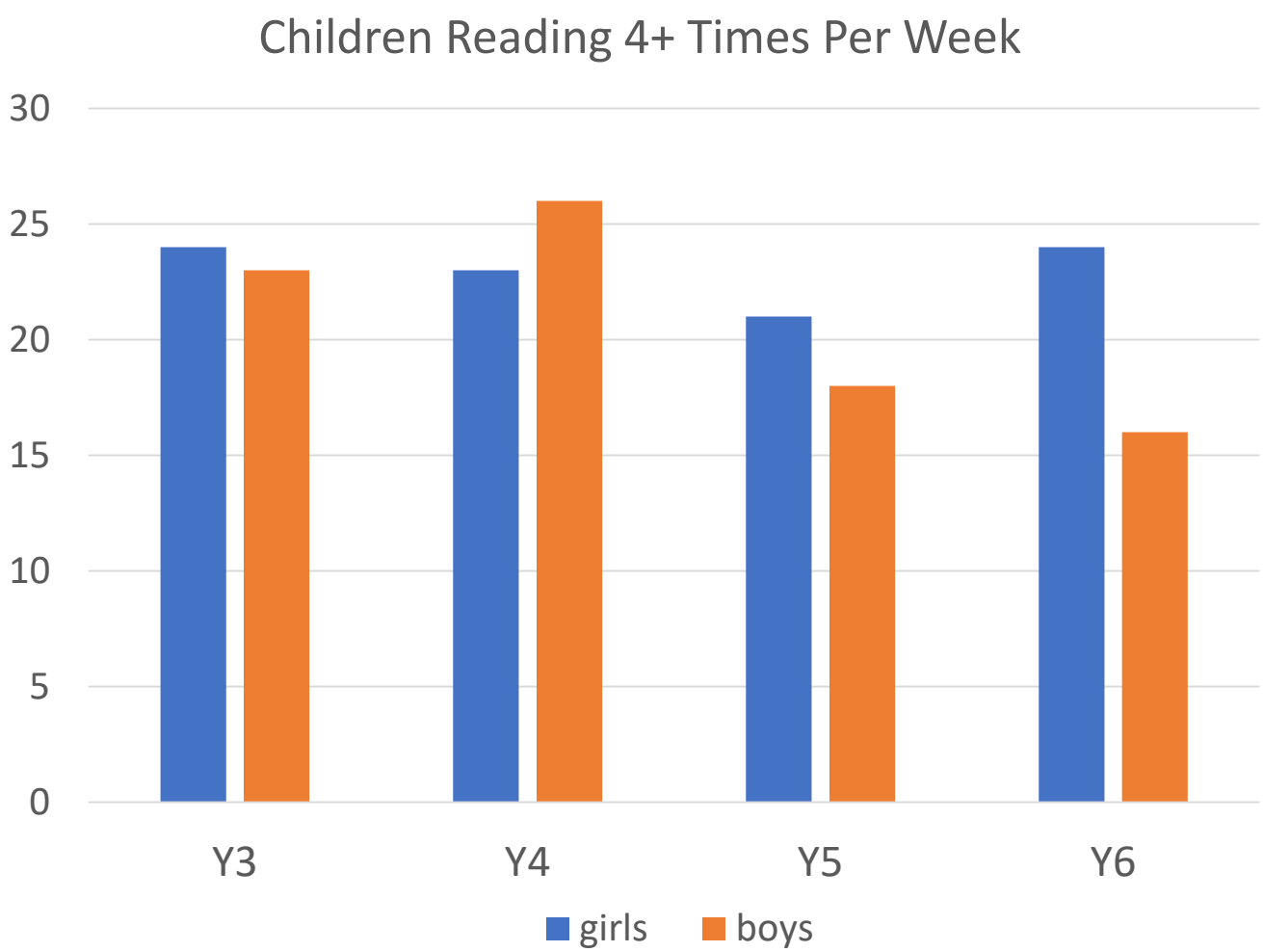
Part 1



	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

Task 52: Making judgements

Part 1

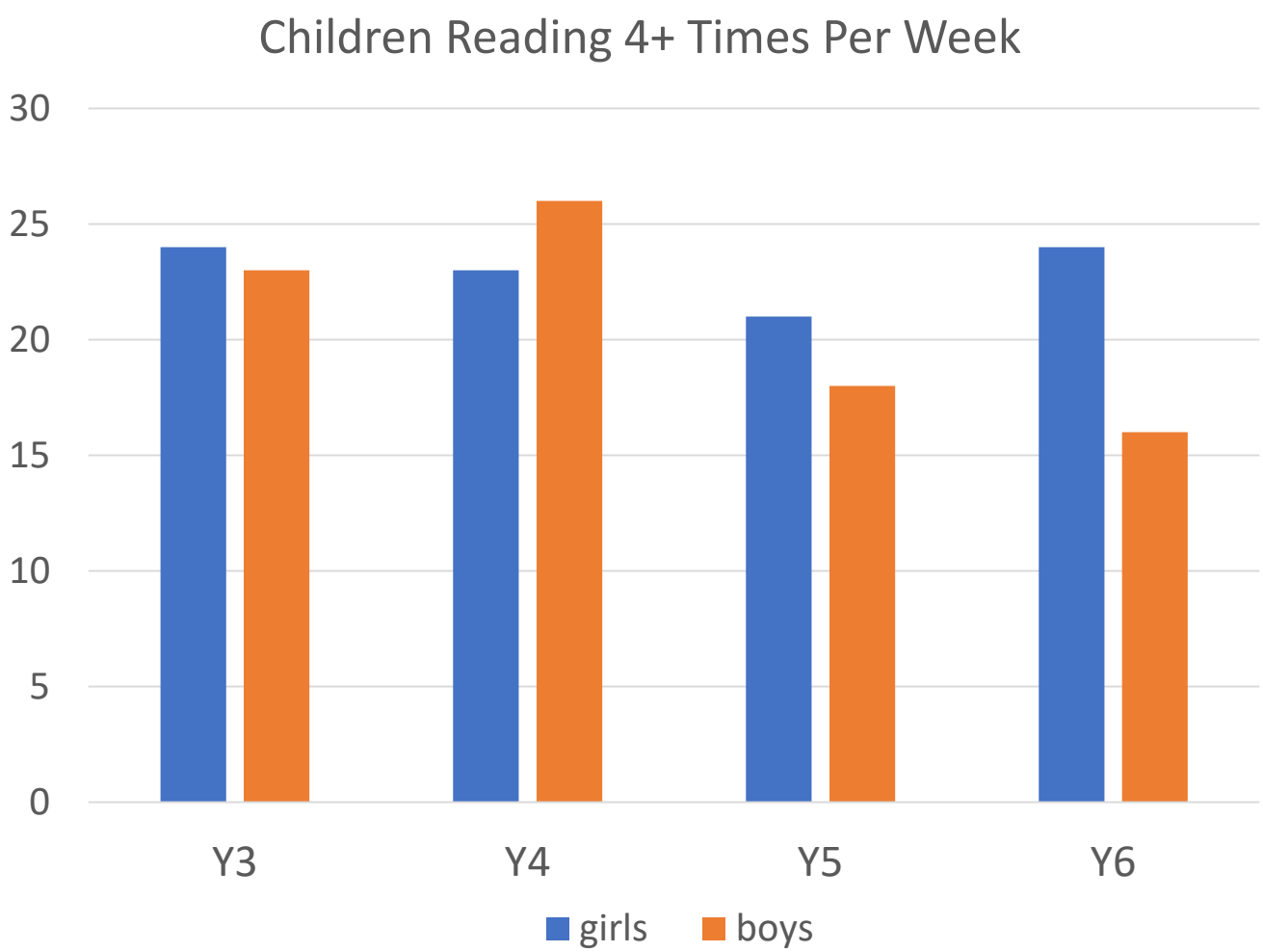


	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

24 girls in Y6 read 4 or more times per week.

Task 52: Making judgements

Part 1

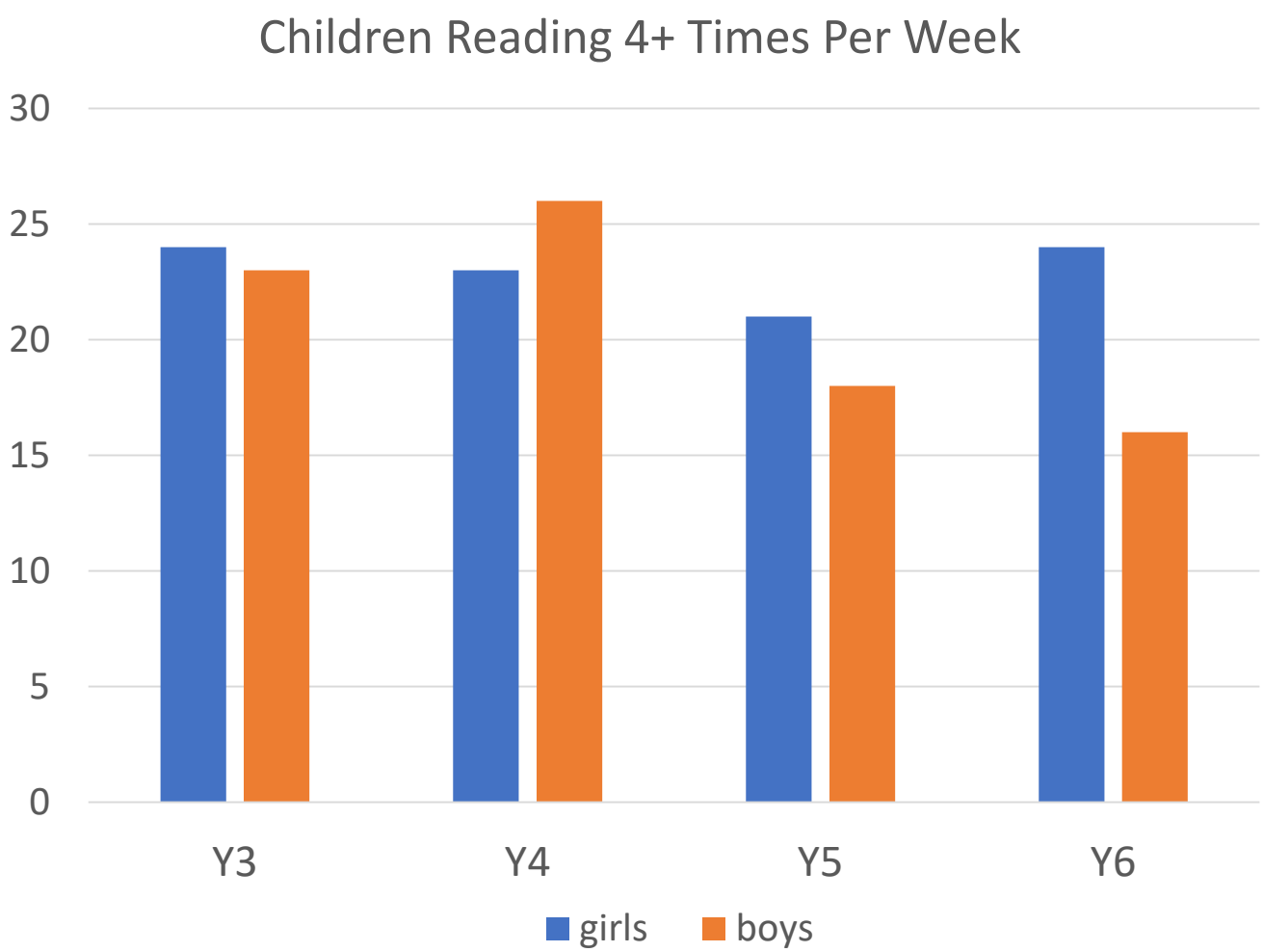


	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

49 children in Y4 read 4 or more times per week.

Task 52: Making judgements

Part 1

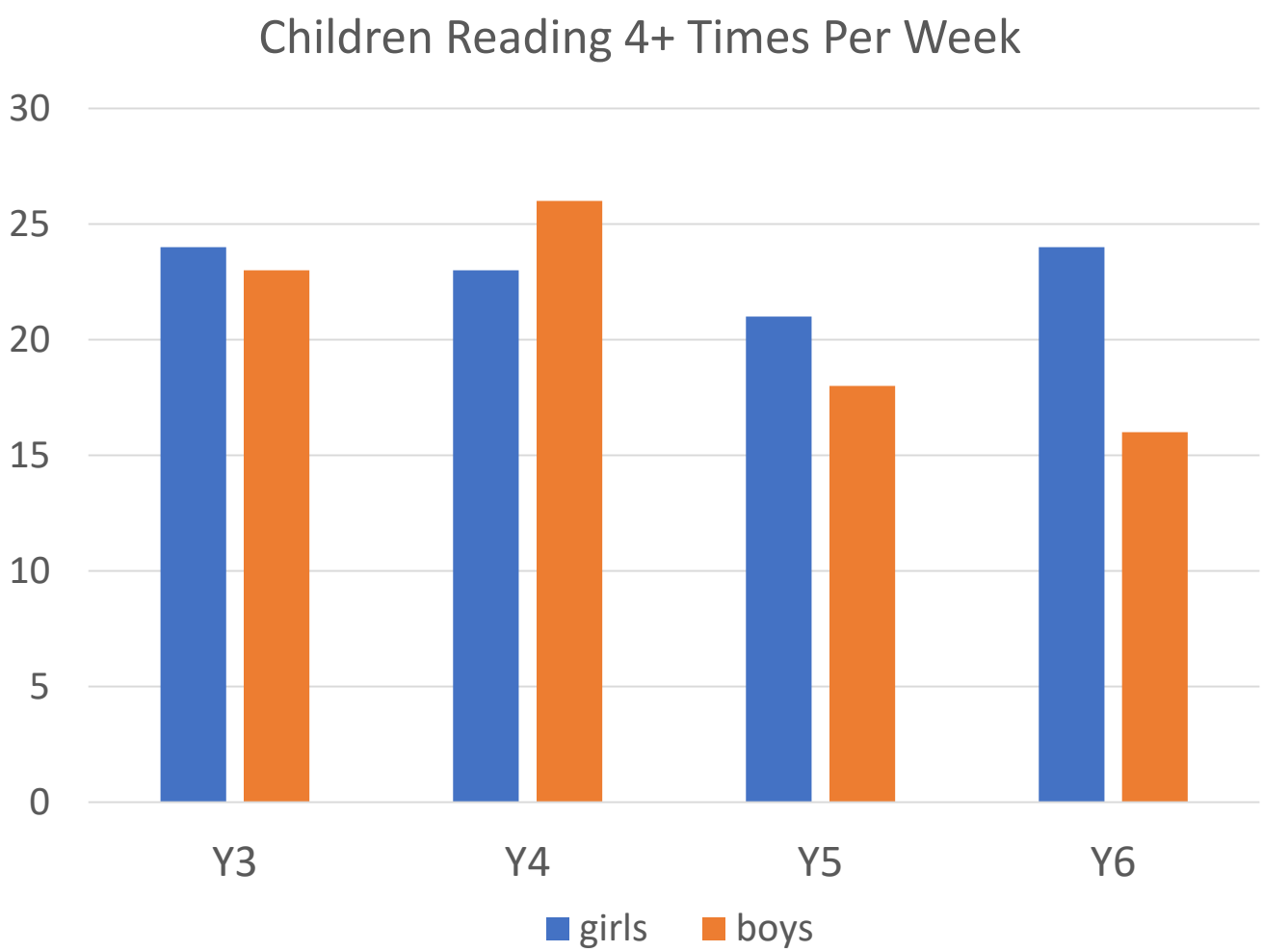


	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

Similar number of girls read in each year group.

Task 52: Making judgements

Part 1

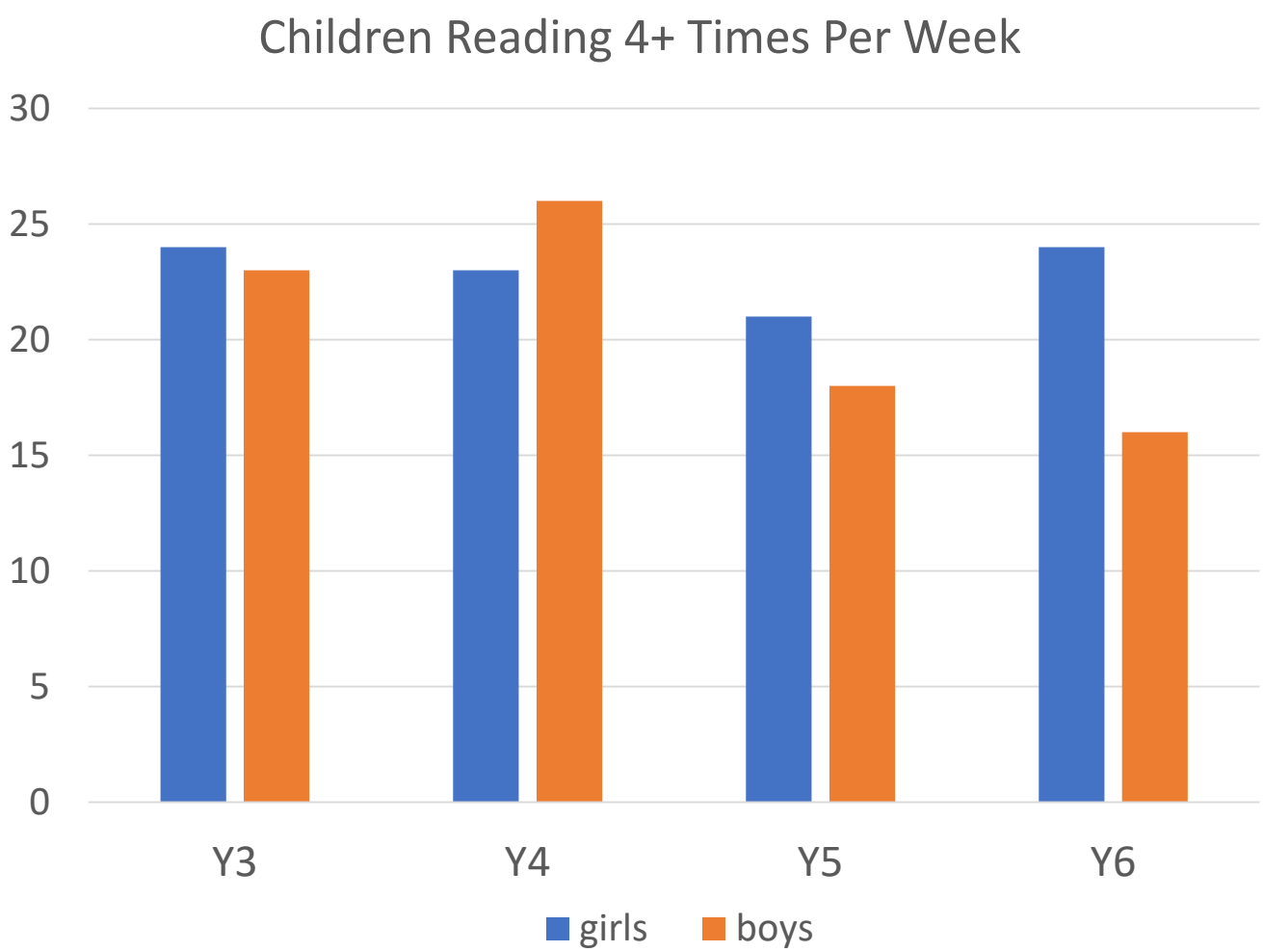


	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

Fewer boys read in Y5-6 than in Y3-4

Task 52: Making judgements

Part 1

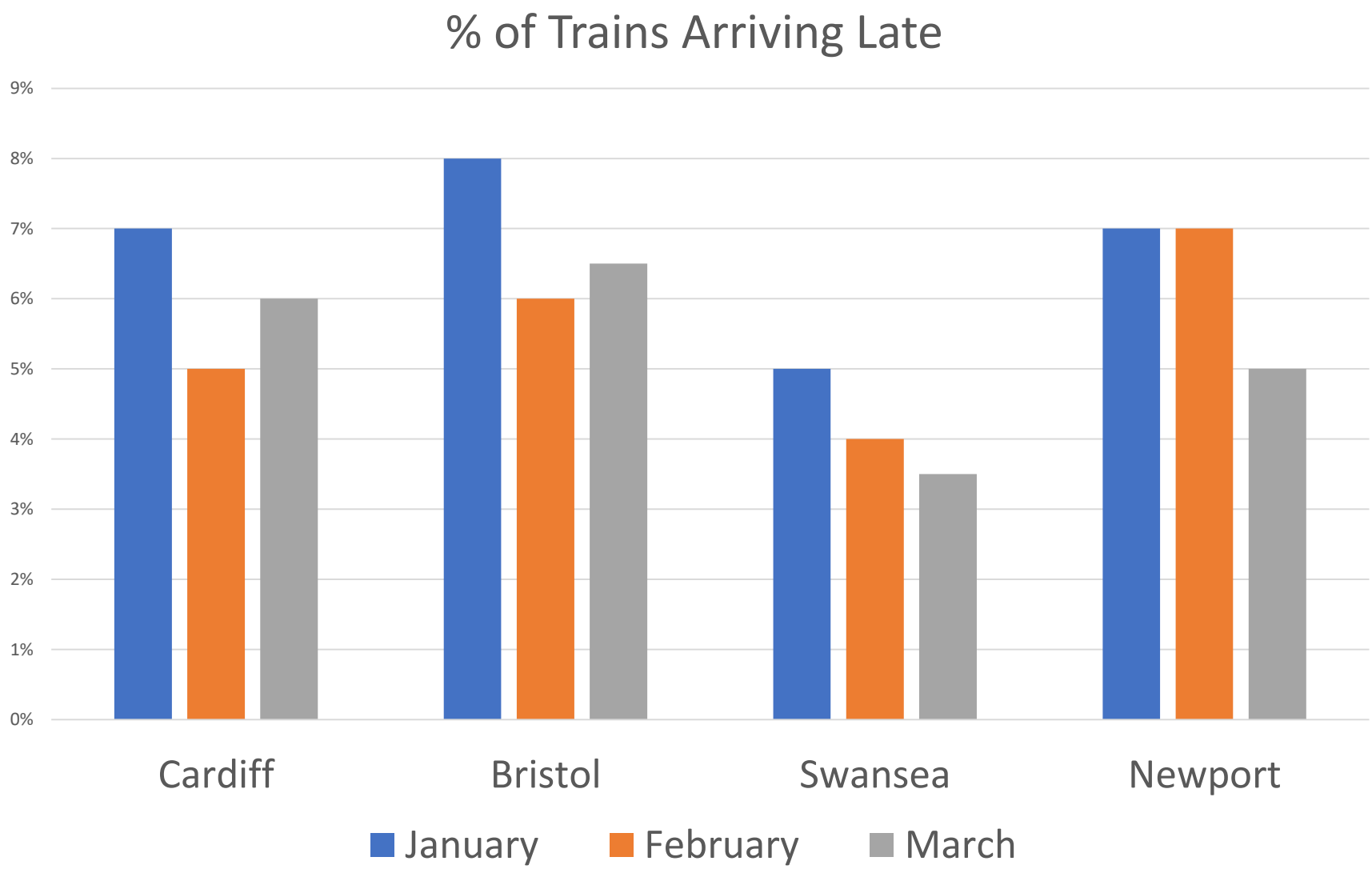


	Y3	Y4	Y5	Y6
Boys	23	26	18	16
Girls	24	23	21	24

We don't know how many children there are in total. It is possible that all the boys in Y6 read 4 or more times per week.

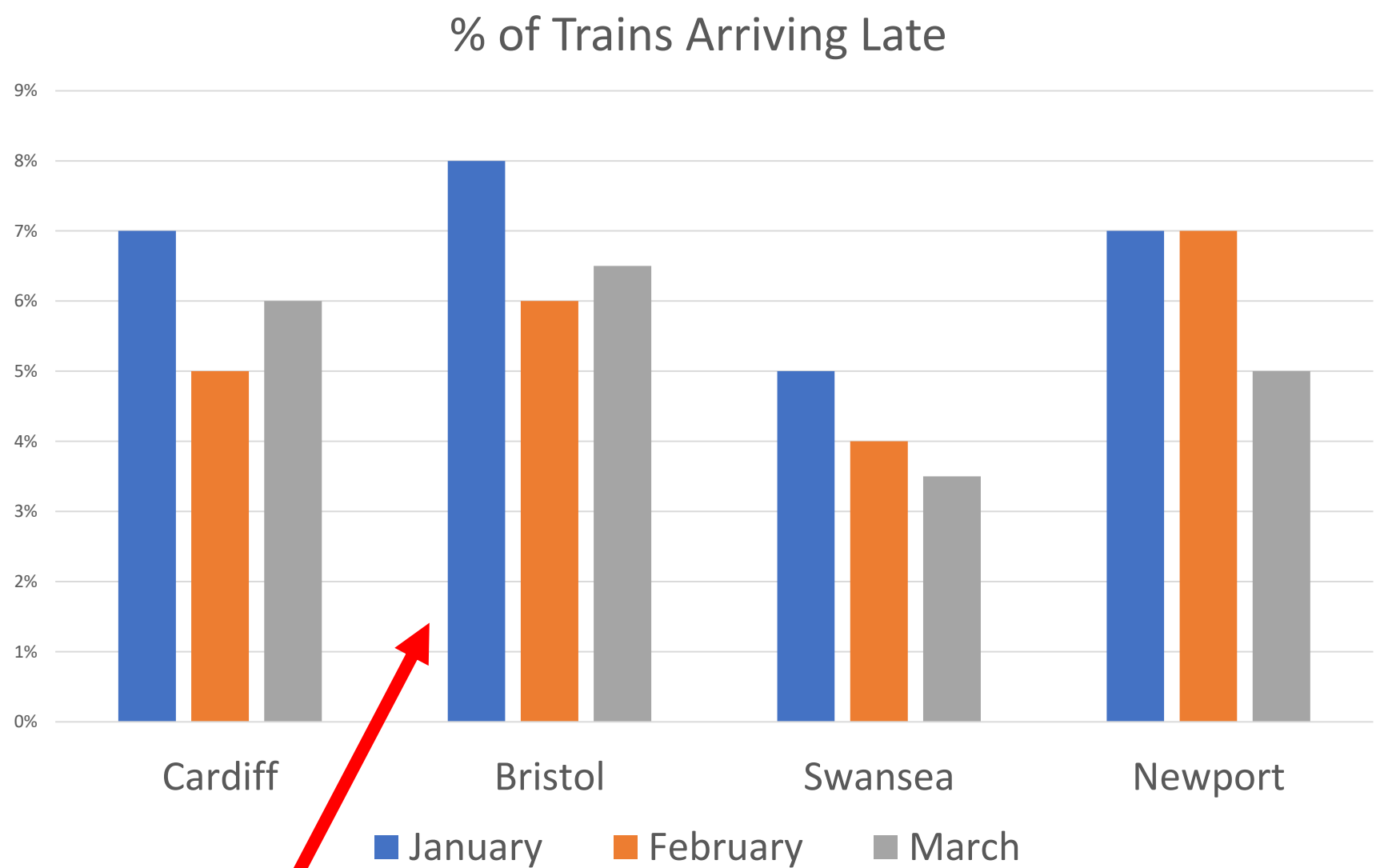
Task 52: Making judgements

Part 2



Task 52: Making judgements

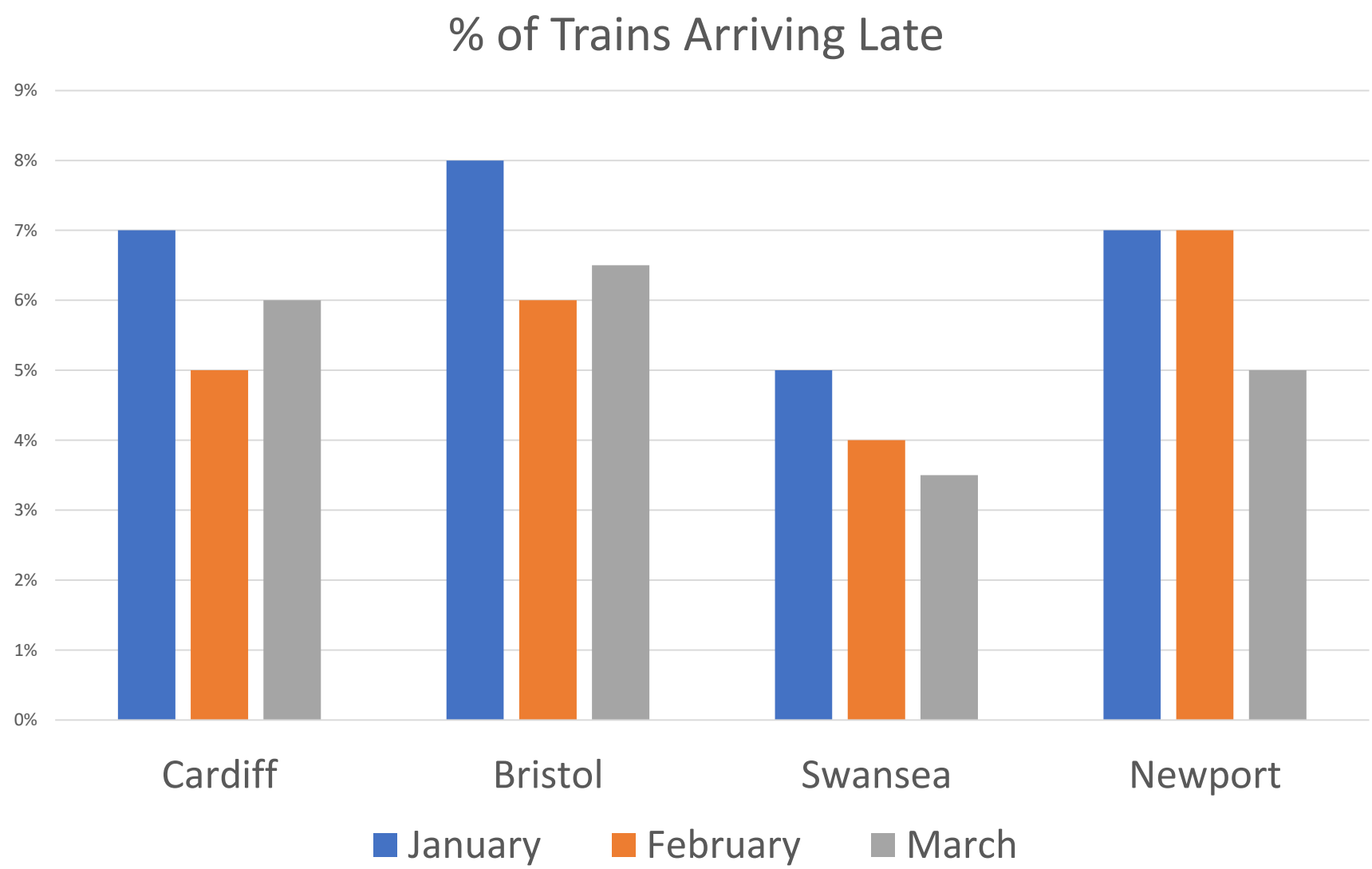
Part 2



Higher % trains late means <u>least</u> trains on time

Task 52: Making judgements

Part 2



Highest % of trains late in January. Can you suggest why?

Task 53: Train timetables

Part 1

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

Task 53: Train timetables

Part 1

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	**7:54**	9:15	10:36	12:04

First train

Task 53: Train timetables

Part 1

Tinford	6:20	7:40	**9:05**	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

Third train

Task 53: Train timetables

Part 1

Tinford	6:20	**7:40**	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	**9:15**	10:36	12:04

7:40 to 9:15 = 1 hour 35 minutes

Task 53: Train timetables

Part 2

Tinford	6:20	**7:40**	**9:05**	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	**9:15**	**10:36**	12:04

Train 1: 7:40 to 9:15 = 1 hour 35 minutes

Train 2: 9:05 to 10:36 = 1 hour 31 minutes

Task 53: Train timetables

Part 2

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The longest journey from Tinford to Denley is 23 minutes.

Task 53: Train timetables

Part 2

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The longest journey from Tinford to Denley is 23 minutes.

The shortest journey from Denley to Garbury is 41 minutes.

Task 53: Train timetables

Part 2

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The longest journey from Tinford to Denley is 23 minutes.

The shortest journey from Denley to Garbury is 41 minutes.

The shortest journey from Garbury to Penfield is 27 minutes.

Task 53: Train timetables

Part 3

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The 8:03 from Denley arrives in Garbury at 8:47am.

Task 53: Train timetables

Part 3

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The 8:03 from Denley arrives in Garbury at 8:47am.

Mrs Patel has a 10-minute walk. She would arrive at 8:57am.

Task 53: Train timetables

Part 3

Tinford	6:20	7:40	9:05	10:32
Denley	6:42	8:03	9:27	10:54
Garbury	7:25	8:47	10:08	11:37
Penfield	7:54	9:15	10:36	12:04

The 8:03 from Denley arrives in Garbury at 8:47am.

Mrs Patel has a 10-minute walk. She would arrive at 8:57am.

Is this a good expected time of arrival for Mrs Patel's 9:00am interview?

Task 54: Comparing teams

League Table (top 4 teams):

	Played	Points	Won	Drawn	Lost	Goals for	Goals against
Keyton Town	28	60	18	6	4	68	34
Tanbury Rovers	28	55	15	10	3	53	25
Denfield F.C.	28	49	14	7	7	59	41
Conley Athletic	28	48	15	3	10	60	49

Task 54: Comparing teams

League Table (top 4 teams):

	Played	Points	Won	Drawn	Lost	Goals for	Goals against
Keyton Town	28	60	18	6	4	68	34
Tanbury Rovers	28	55	**15**	**10**	**3**	53	25
Denfield F.C.	28	49	14	7	7	59	41
Conley Athletic	28	48	15	3	10	60	49

Tanbury had the fewest losses but too many draws compared to Keyton Town.

Task 54: Comparing teams

League Table (top 4 teams):

	Played	Points	Won	Drawn	Lost	Goals for	Goals against
Keyton Town	28	60	18	6	4	68	34
Tanbury Rovers	28	55	15	10	3	53	**25**
Denfield F.C.	28	49	14	7	7	59	41
Conley Athletic	28	48	15	3	10	60	49

Tanbury had by far the best defence.

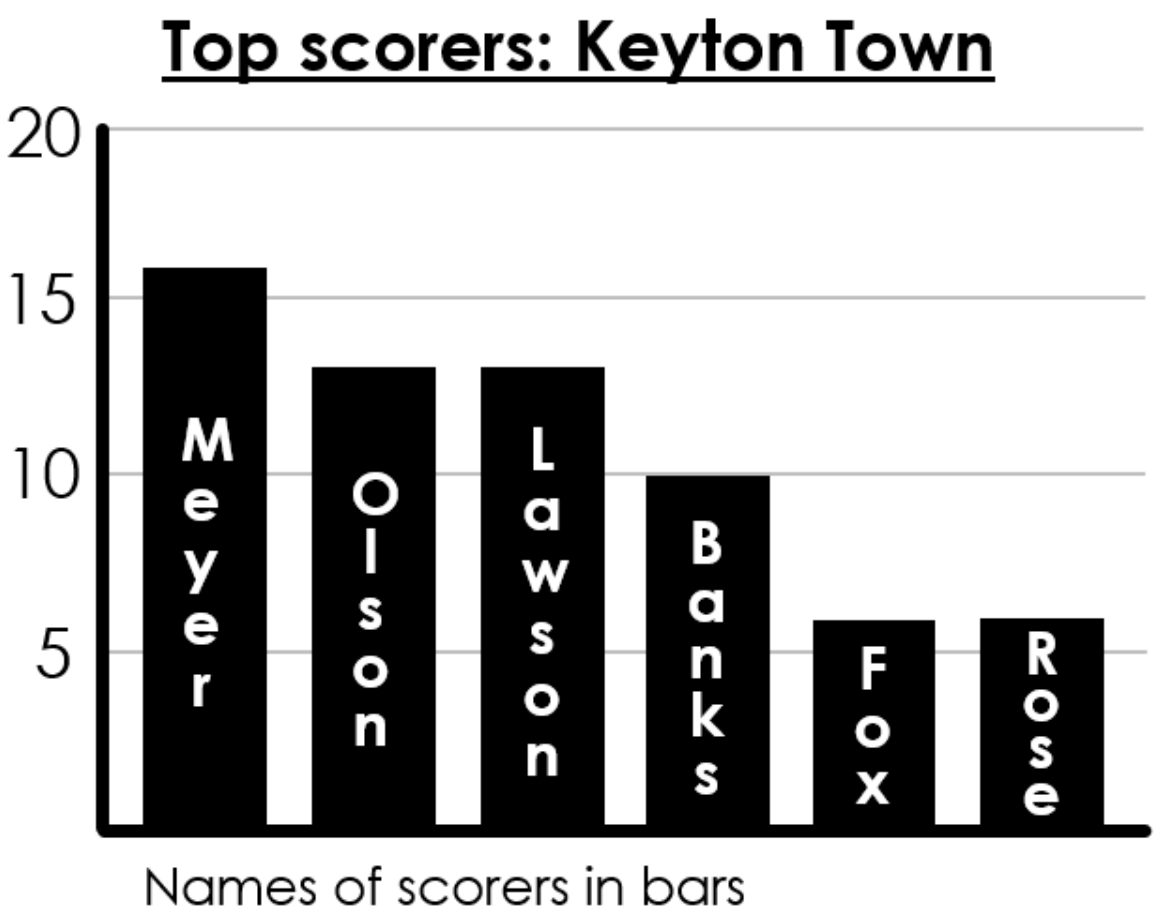
Task 54: Comparing teams

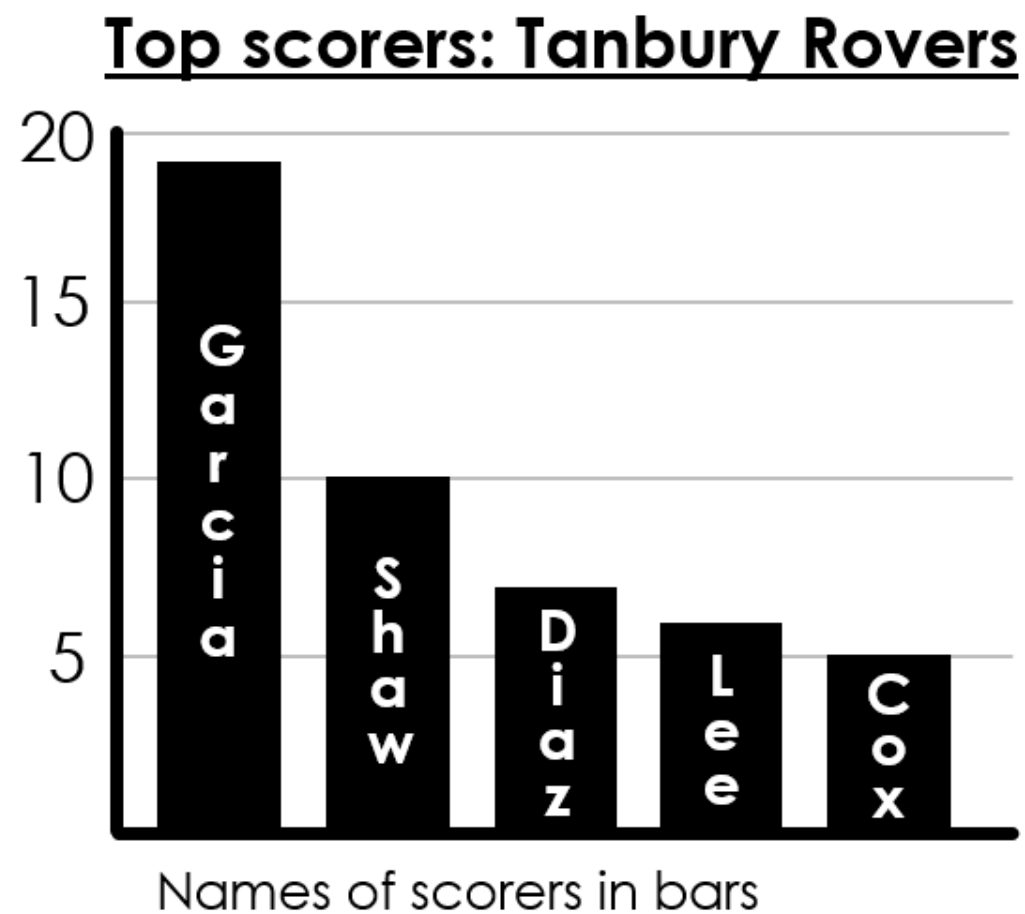
League Table (top 4 teams):

	Played	Points	Won	Drawn	Lost	Goals for	Goals against
Keyton Town	28	60	18	6	4	68	34
Tanbury Rovers	28	55	15	10	3	**53**	25
Denfield F.C.	28	49	14	7	7	59	41
Conley Athletic	28	48	15	3	10	60	49

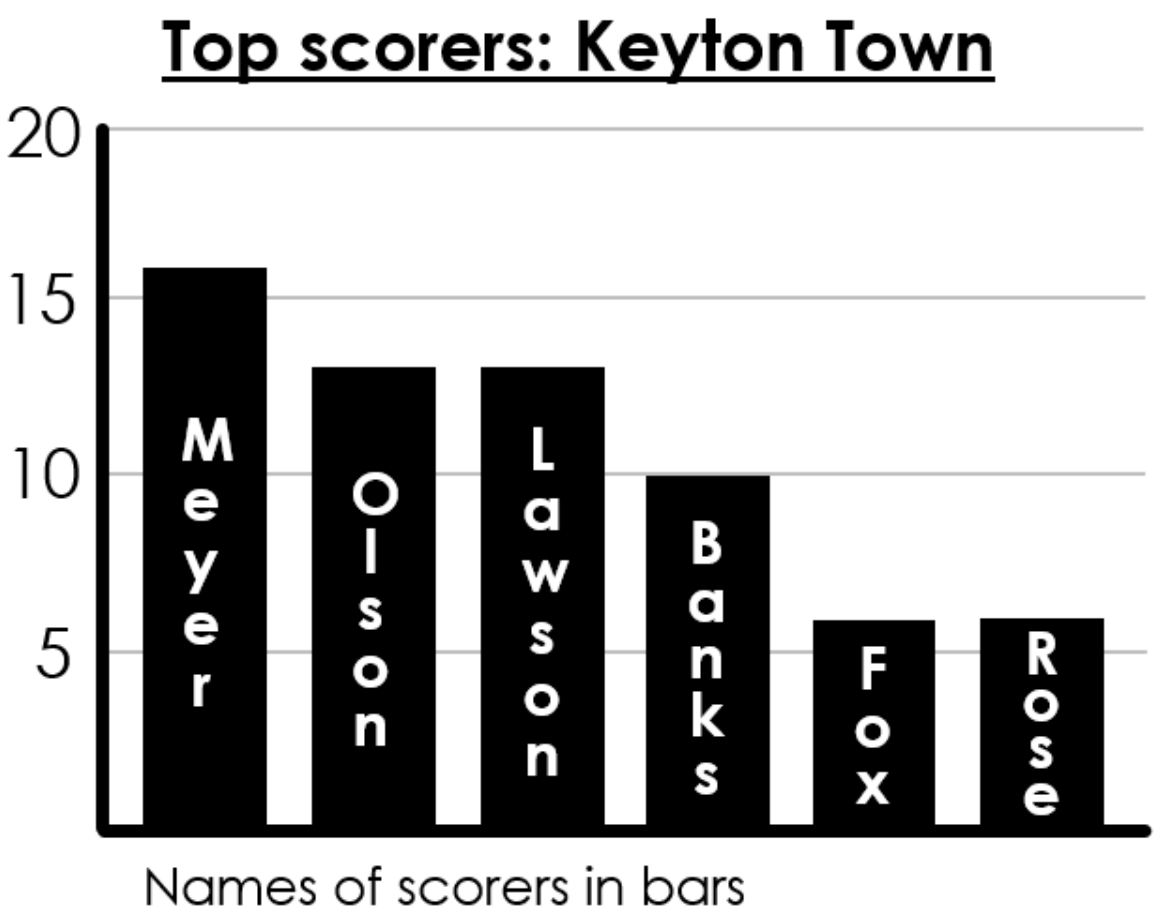
Tanbury scored fewer goals than all the other top 4 teams. They need to score more goals.

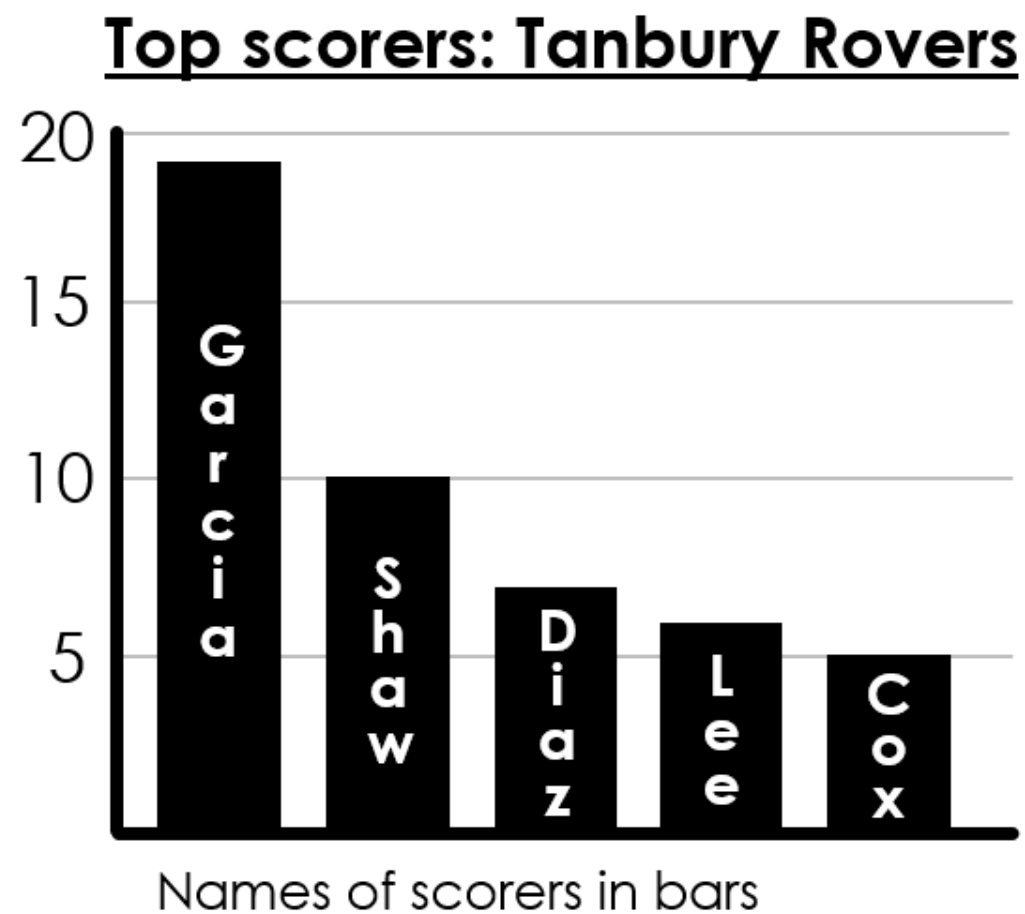
Task 54: Comparing teams





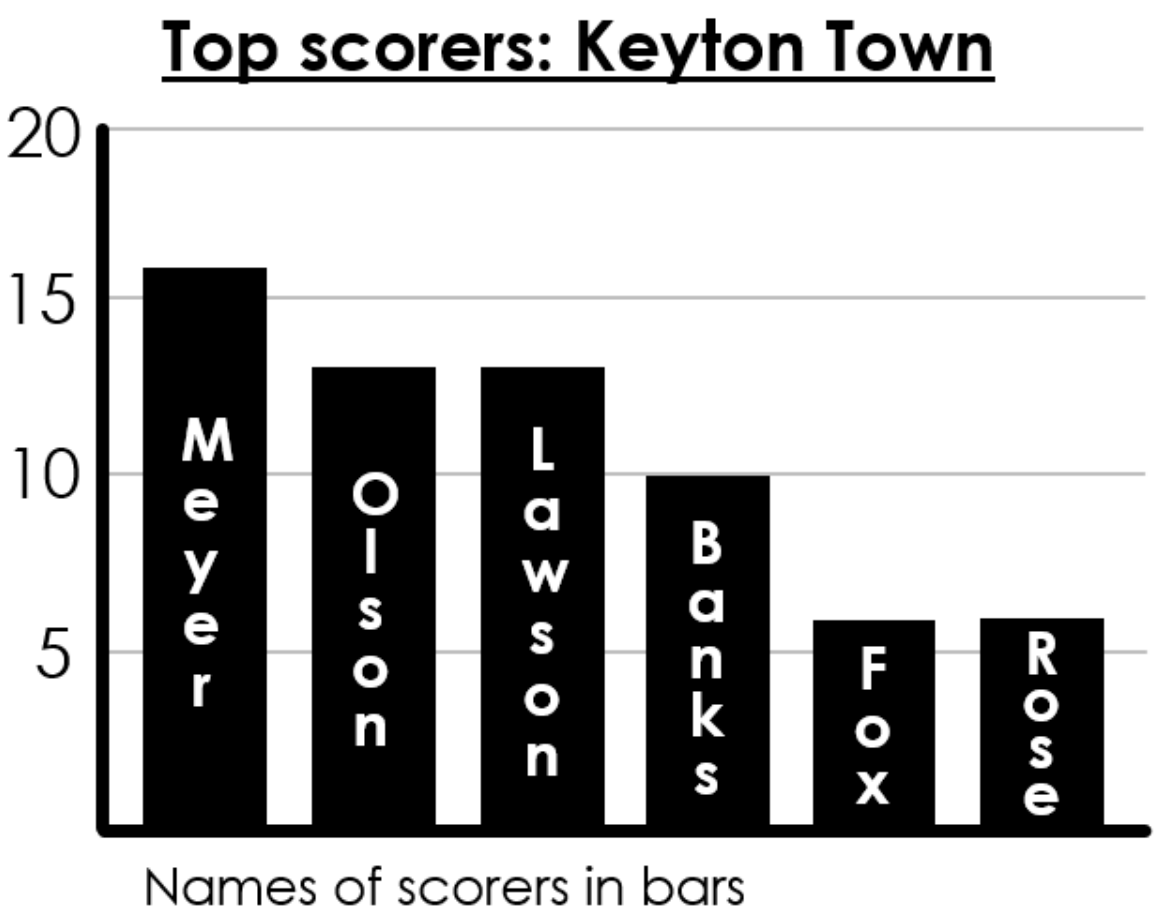
Task 54: Comparing teams

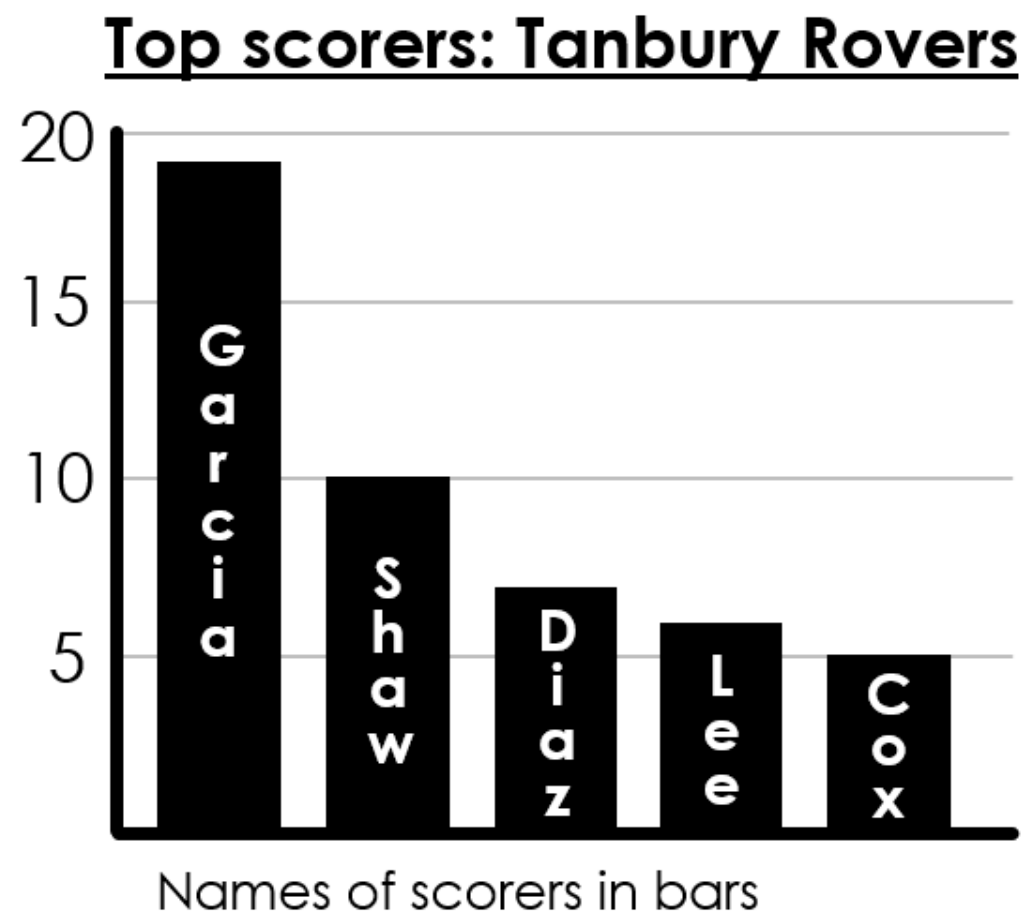




Tanbury have the highest scorer – Garcia with 19 goals.

Task 54: Comparing teams





Keyton have 4 players scoring 10+ goals and 6 players scoring 6+ goals. Tanbury may need <u>different</u> players in their team to score more goals.

Task 54: Comparing teams

Match Statistics (top 4 teams):

	Passes per match	Shots per match	Tackles per match	Total yellow/ red cards
Keyton Town	317	13	23	18 Y 2 R
Tanbury Rovers	251	10	29	21 Y 1 R
Denfield F.C.	247	11	21	14 Y 0 R
Conley Athletic	276	14	19	26 Y 3 R

Task 54: Comparing teams

Match Statistics (top 4 teams):

	Passes per match	Shots per match	Tackles per match	Total yellow/ red cards
Keyton Town	317	13	23	18 Y 2 R
Tanbury Rovers	**251**	**10**	29	21 Y 1 R
Denfield F.C.	247	11	21	14 Y 0 R
Conley Athletic	276	14	19	26 Y 3 R

Tanbury had the fewest shots per game. They also had a relatively low number of passes. This could improve.

Task 54: Comparing teams

Match Statistics (top 4 teams):

	Passes per match	Shots per match	Tackles per match	Total yellow/ red cards
Keyton Town	317	13	23	18 Y 2 R
Tanbury Rovers	251	10	**29**	21 Y 1 R
Denfield F.C.	247	11	21	14 Y 0 R
Conley Athletic	276	14	19	26 Y 3 R

Tanbury had the most tackles per match by far.