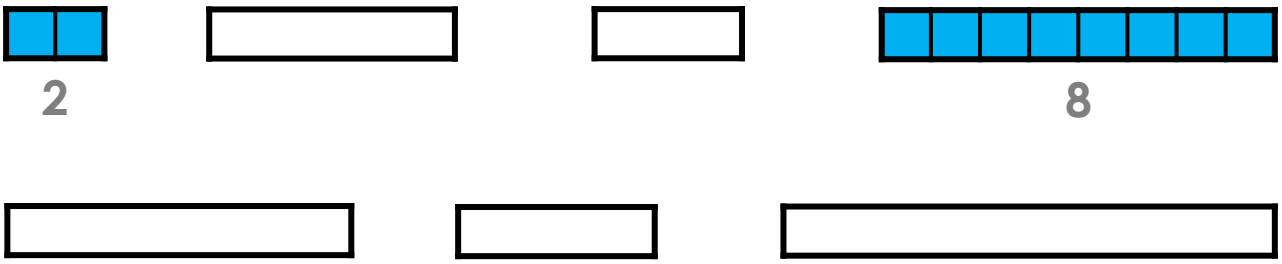
Estimate

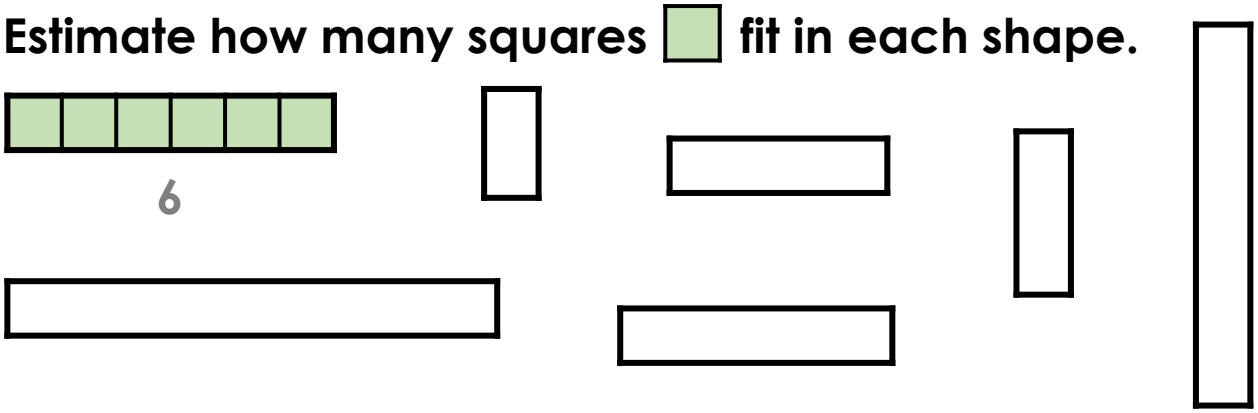
Estimate how many squares ▢ fit in each shape.



Estimate before you draw.

Estimate

Estimate how many squares ▢ fit in each shape.



Estimate before you draw.

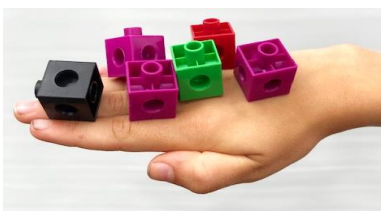
Estimate

How many cubes can you hold in one hand?

I think it will be ☐

It was ☐

How many cubes can you put on the back of your hand?



I think it will be ☐

It was ☐

Estimate

Estimate how many circles ● fit in each shape.

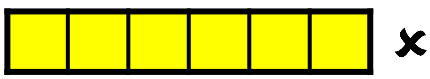
4

Estimate before you draw.

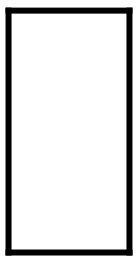
Estimate

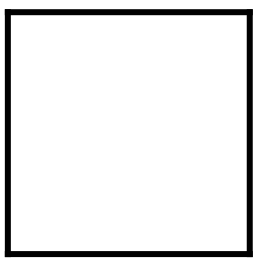
✓ or ✗

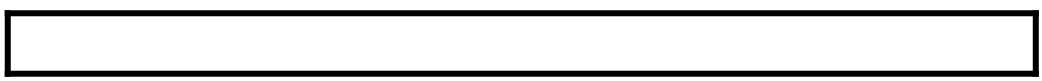
Which of the shapes can fit more than ■ 10 squares?



✗







Estimate

Choose a group of objects. Fill a container.

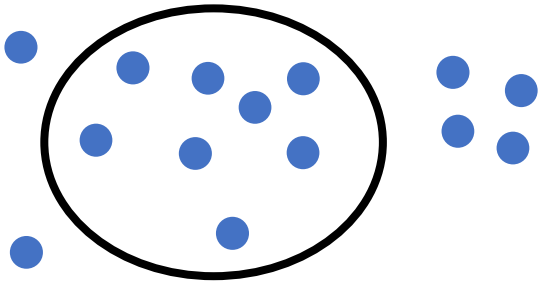
Challenge: make exactly 10.

Example:
More than 10

Objects

Containers

Which Answer?



How many dots circled?

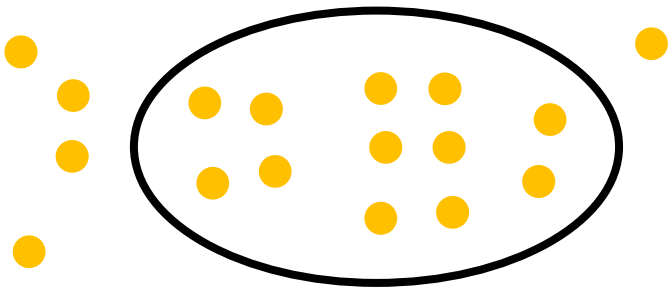
Less than 7

7 to 10

More than 10

No counting! *Explain how you know.*

Which Answer?



How many dots circled?

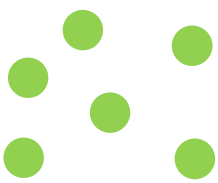
Less than 7

7 to 10

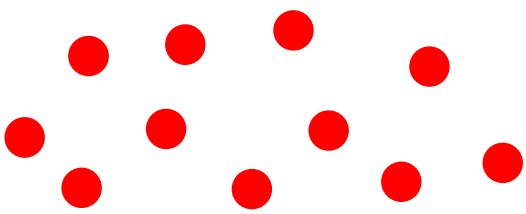
More than 10

No counting! *Explain how you know.*

Estimate

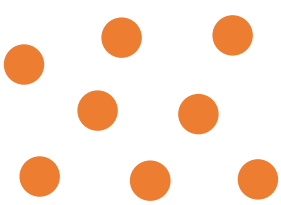


6 green dots.

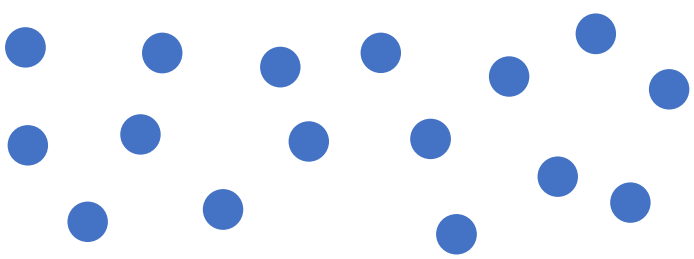


Estimate how many red dots.

Estimate



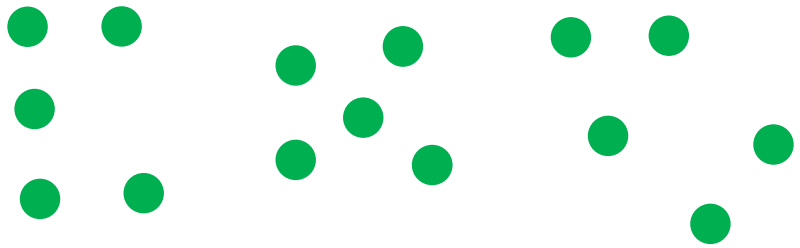
8 orange dots.



Estimate how many blue dots.

Estimate

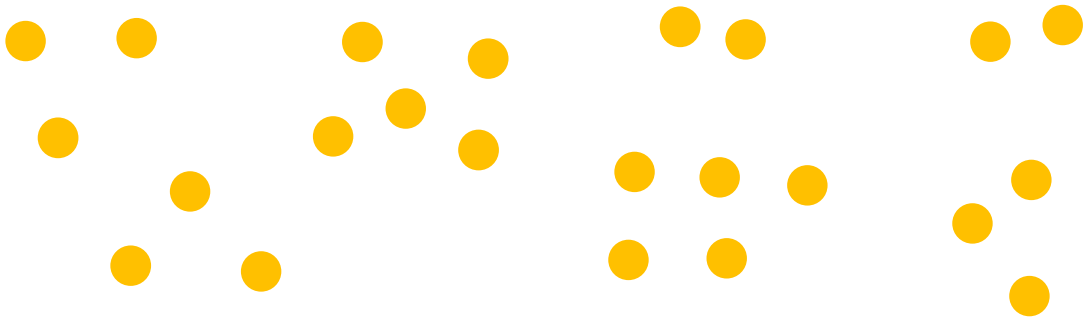
Circle more than 6 and less than 10 without counting.



How do you know?

Estimate

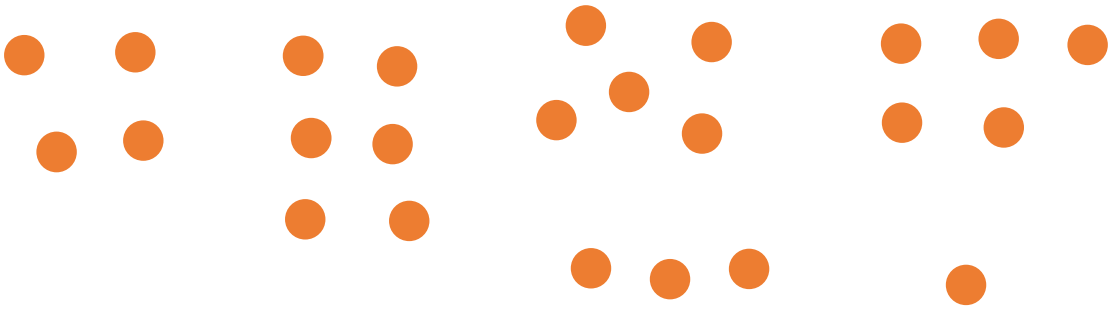
Circle more than 8 and less than 16 without counting.



How do you know?

Estimate

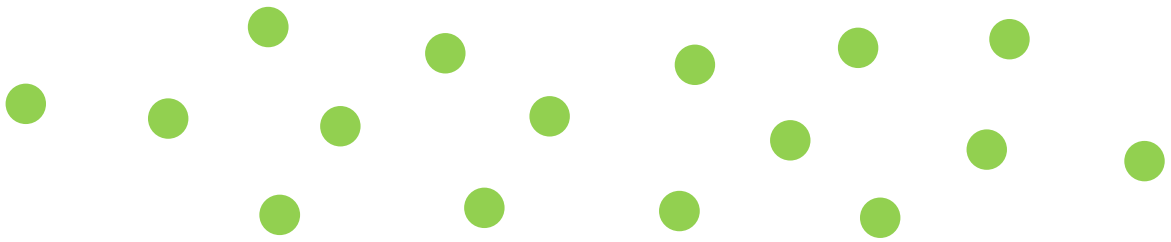
Circle more than 12 and less than 20 without counting.



How do you know?

Estimate

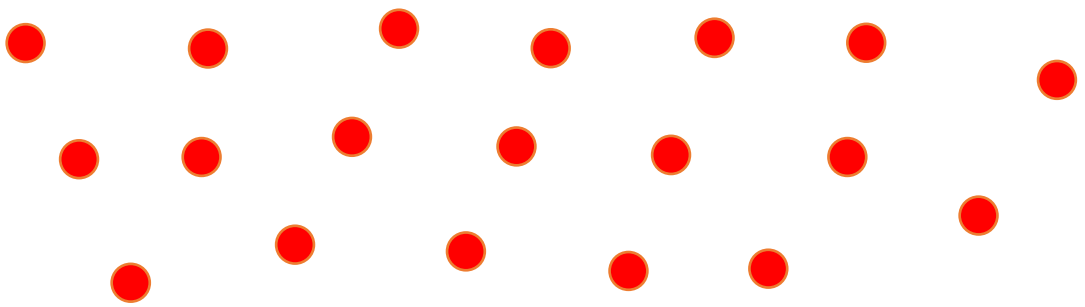
Circle more than 6 and less than 12 without counting.



Count to check.

Estimate

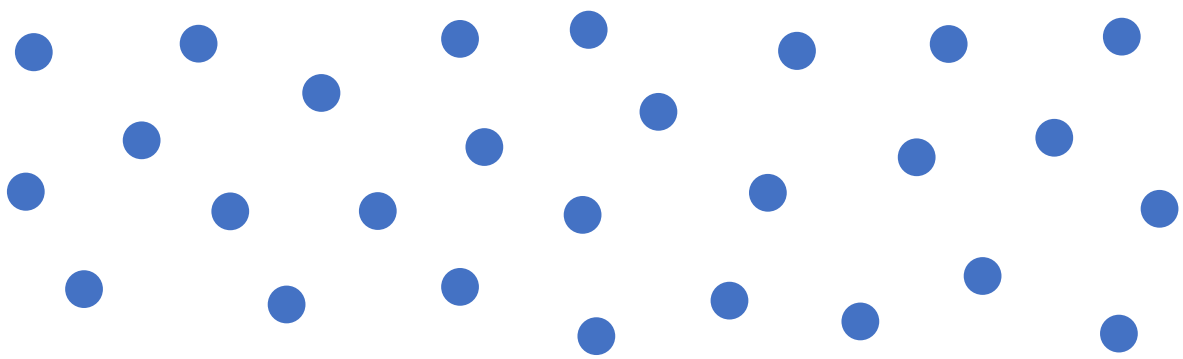
Circle more than 8 and less than 16 without counting.



Count to check.

Estimate

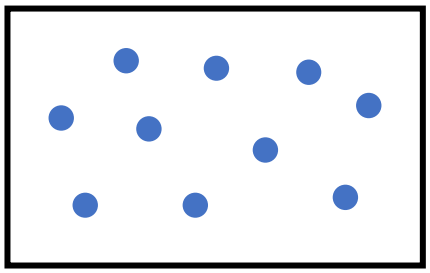
Circle more than 10 and less than 20 without counting.

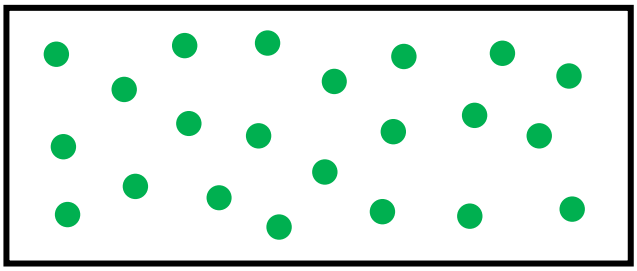


Count to check.

Agree or Disagree?

Estimate the number of green dots. **No counting!**





This is 10

✓ or ✗

Lots more green than blue

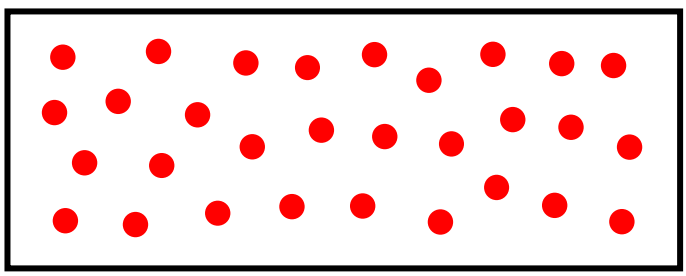
About 6 more green dots

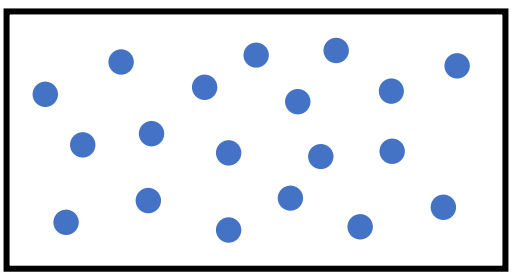
About 40 green dots

Green about double blue

Read the Pictures

Estimate the number of blue dots. **No counting!**





This is 30

✓ or ✗

About 4 less blue than red

About 10 less blue than red

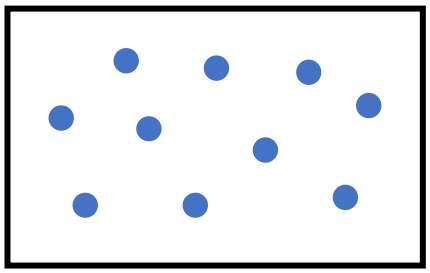
About 20 less blue than red

Estimate

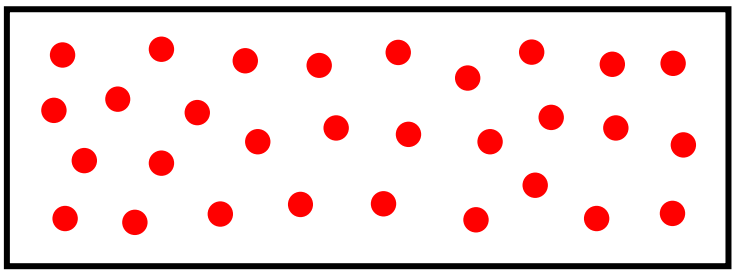
It is more than…

It is less than…

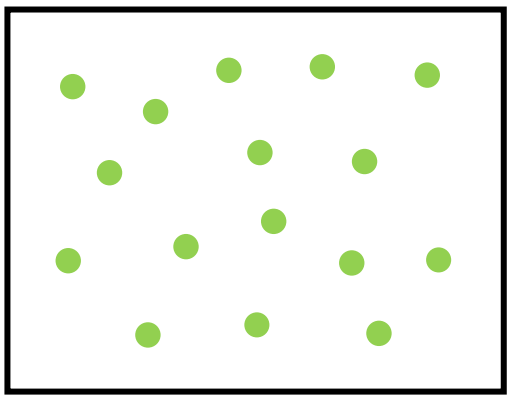
Choose an answer. **No counting!**
Then, count to check.



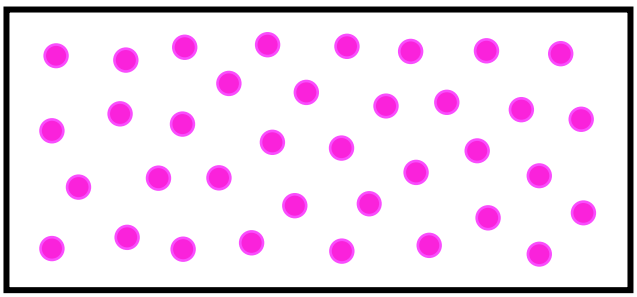
This is 10



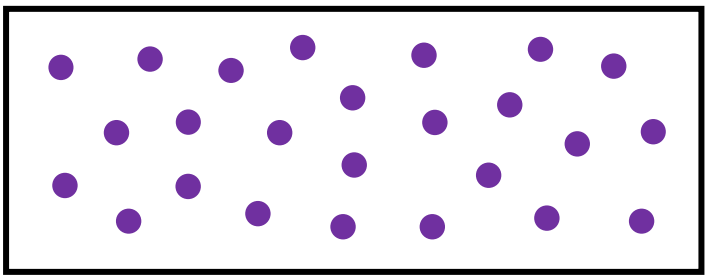
This is 30



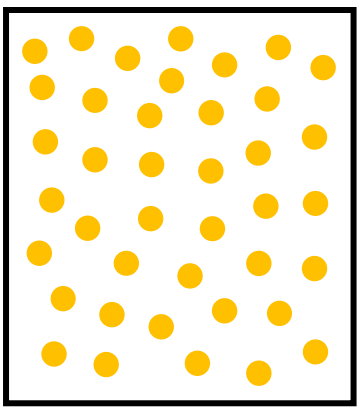
16 **OR** 25



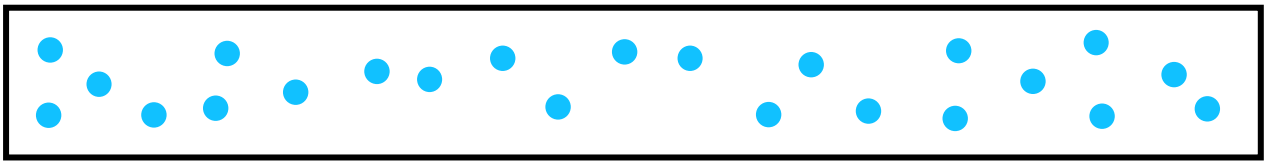
35 **OR** 55



15 **OR** 25



26 **OR** 40



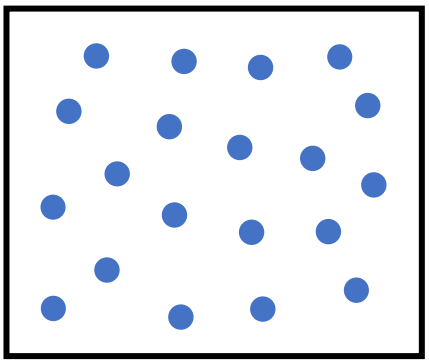
23 **OR** 35

Estimate

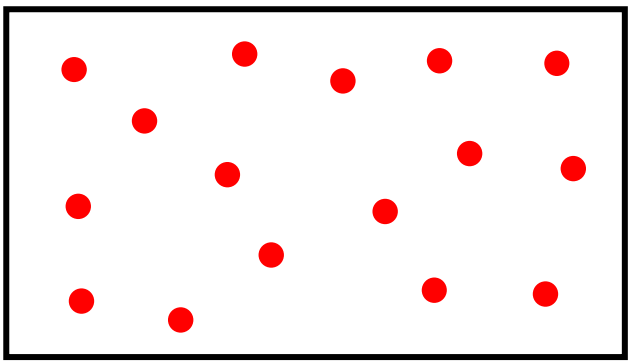
It is more than…

It is less than…

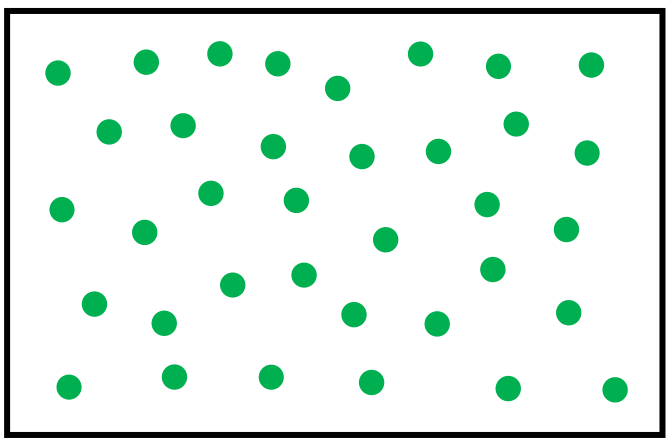
Choose an answer. **No counting!**
Then, count to check.



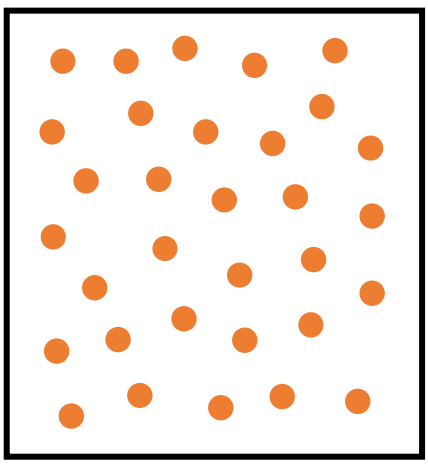
This is 20



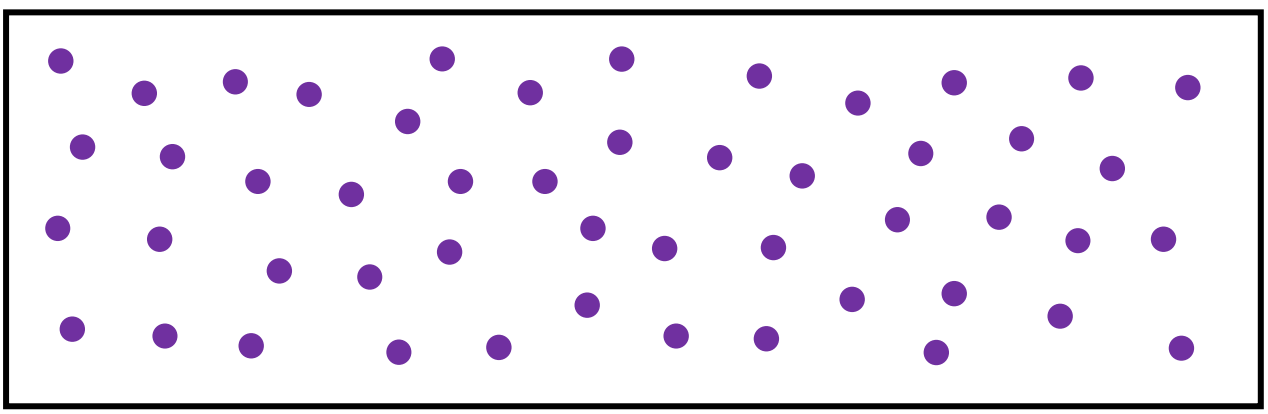
16 **OR** 26



23 **OR** 36



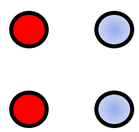
32 **OR** 48



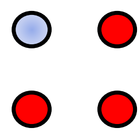
50 **OR** 90

Read the Pictures

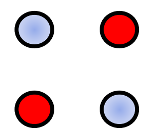
The **whole** is...
The **parts** are...



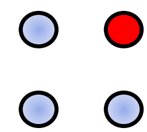
The **whole** is...
The **parts** are...



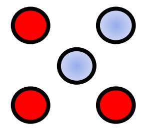
The **whole** is...
The **parts** are...



The **whole** is...
The **parts** are...



The **whole** is...
The **parts** are...



The **whole** is...
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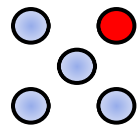

The **whole** is...
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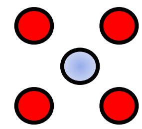
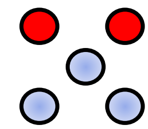


The **whole** is...
The **parts** are...



The **whole** is...
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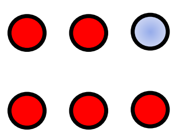

The **whole** is...
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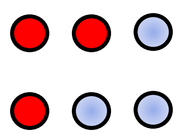
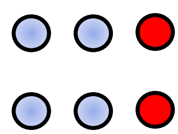


The **whole** is...
The **parts** are...



The **whole** is...
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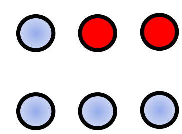
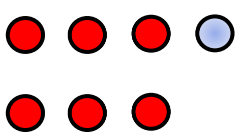


The **whole** is...
The **parts** are...



The **whole** is...
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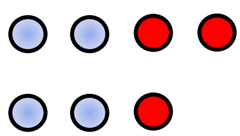
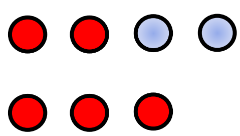
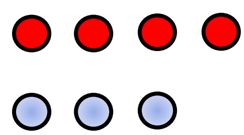


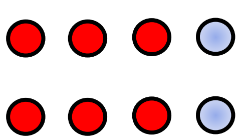
The **whole** is...
The **parts** are...



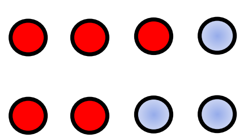
The **whole** is...
The **parts** are...



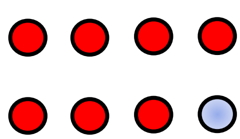
The **whole** is...
The **parts** are...



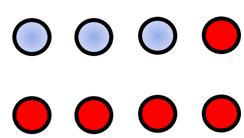
The **whole** is...
The **parts** are...



The **whole** is...
The **parts** are...

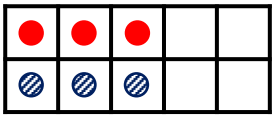


The **whole** is...
The **parts** are...

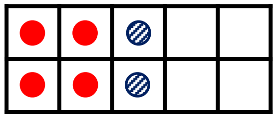


Read the Pictures

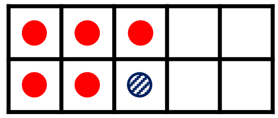
The **whole** is…
The **parts** are…



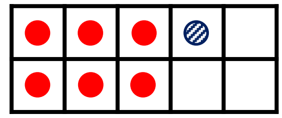
The **whole** is…
The **parts** are…



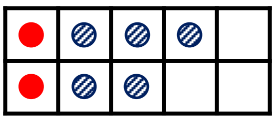
The **whole** is…
The **parts** are…



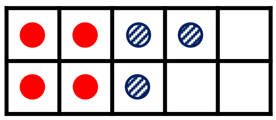
The **whole** is…
The **parts** are…



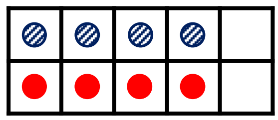
The **whole** is…
The **parts** are…



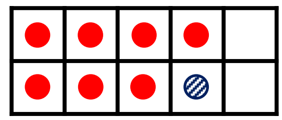
The **whole** is…
The **parts** are…



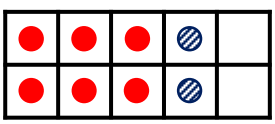
The **whole** is…
The **parts** are…



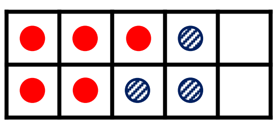
The **whole** is…
The **parts** are…



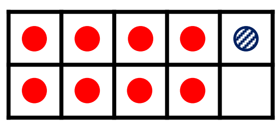
The **whole** is…
The **parts** are…



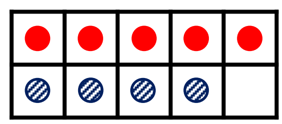
The **whole** is…
The **parts** are…



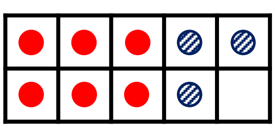
The **whole** is…
The **parts** are…



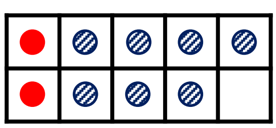
The **whole** is…
The **parts** are…



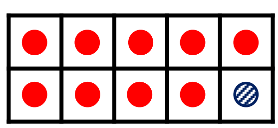
The **whole** is…
The **parts** are…



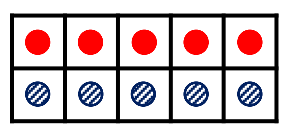
The **whole** is…
The **parts** are…



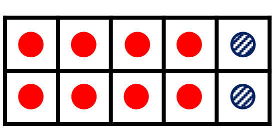
The **whole** is…
The **parts** are…



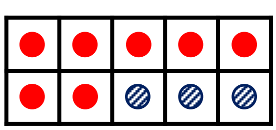
The **whole** is…
The **parts** are…



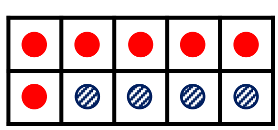
The **whole** is…
The **parts** are…



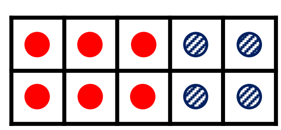
The **whole** is…
The **parts** are…



The **whole** is…
The **parts** are…

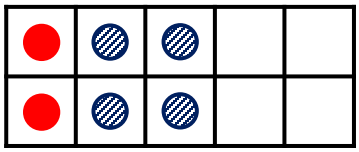


The **whole** is…
The **parts** are…



Correct or Not Correct? ✓ or ✗

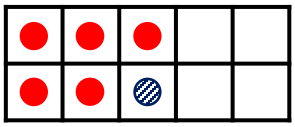
2 + 4 = 6



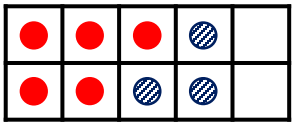
6 = 2 + 4

4 = 2 + 6

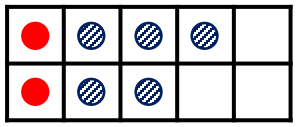
Read the Pictures



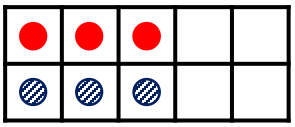
□ + □ = 6



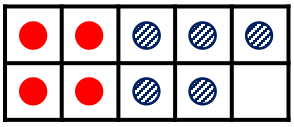
□ + □ = 8



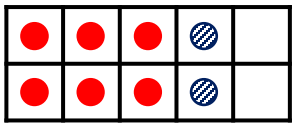
□ + □ = 7



6 = □ + □

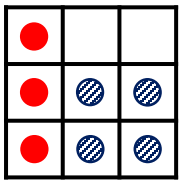


9 = □ + □

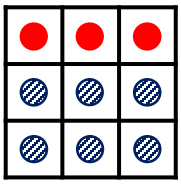


□ = □ + □

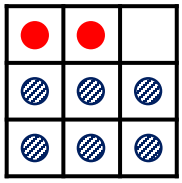
Read the Pictures



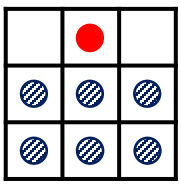
□ + □ = 7



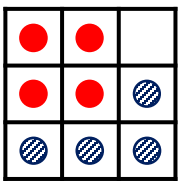
□ + □ = 9



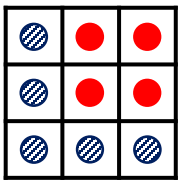
□ + □ = 8



7 = □ + □

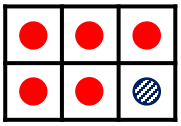


8 = □ + □



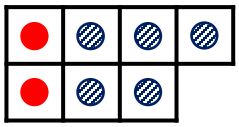
□ = □ + □

Read the Pictures



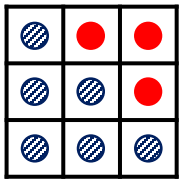
□ = 5 + □

The whole is…



□ = 2 + □

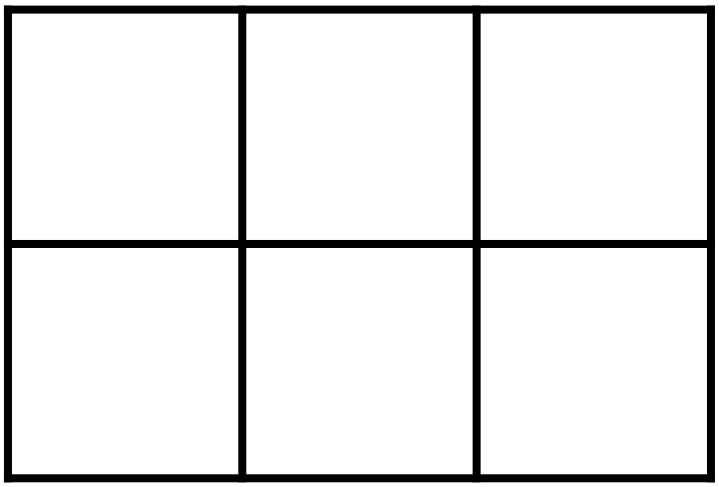
The parts are… and…



□ + □ = □

Explore

Show the answers with counters:



6 = 4 + □

6 = □ + 5

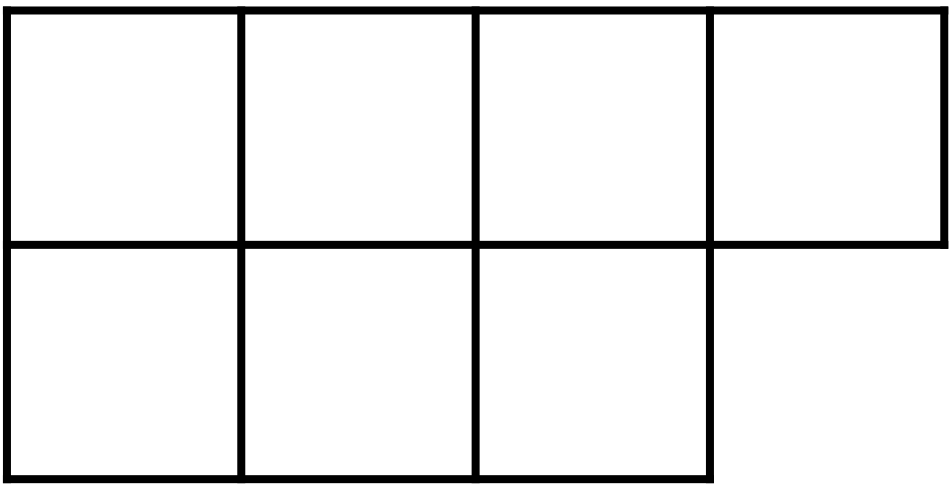
6 = □ + 3

6 = 2 + □

6 = □ + 0

Explore

Show the answers with counters:



7 = 3 + □

7 = □ + 5

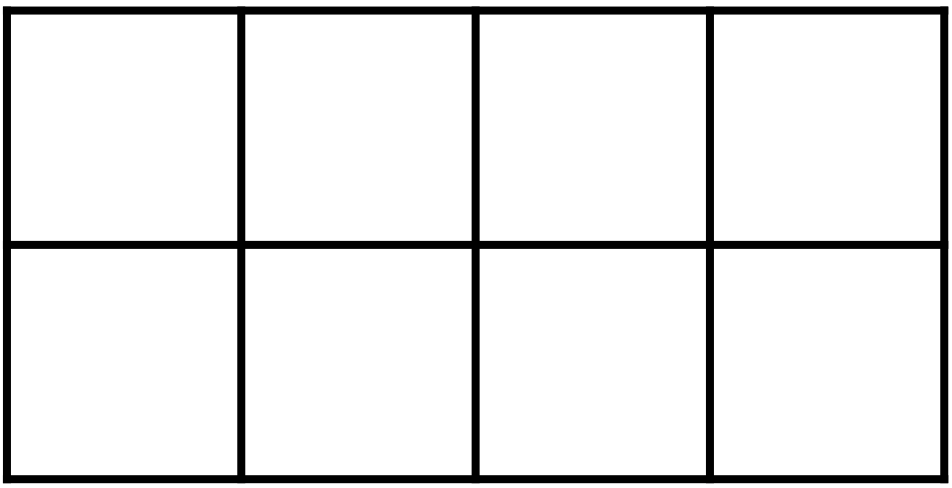
7 = 1 + □

7 = 0 + □

7 = □ + □

Explore

Show the answers with counters:



The whole is… *The parts are… and…*

$8 = 3 + \square$

$8 = \square + 2$

$8 = \square + 6$

$8 = 4 + \square$

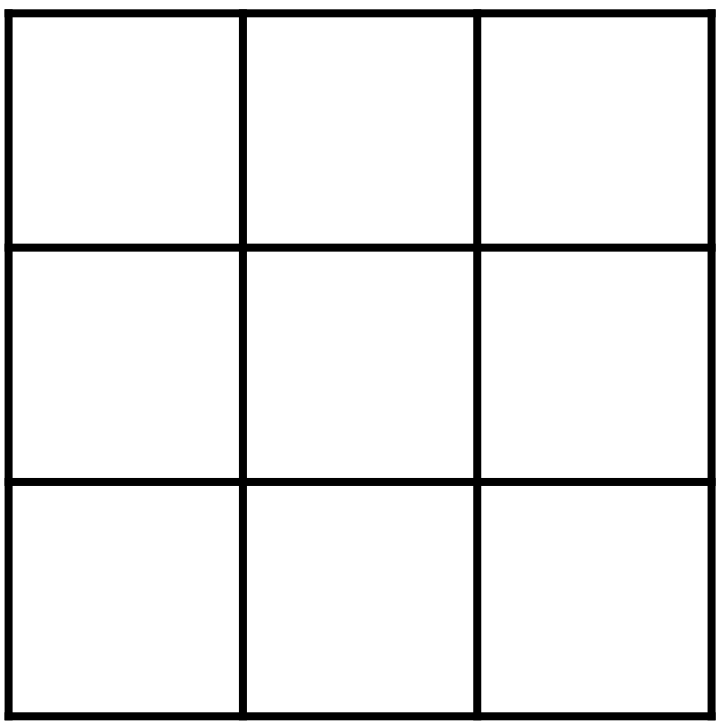
$8 = \square + 1$

$8 = 5 + \square$

$8 = 0 + \square$

Explore

Show the answers with counters:



The whole is… *The parts are… and…*

$9 = \square + 4$

$9 = \square + 3$

$9 = 2 + \square$

$9 = 8 + \square$

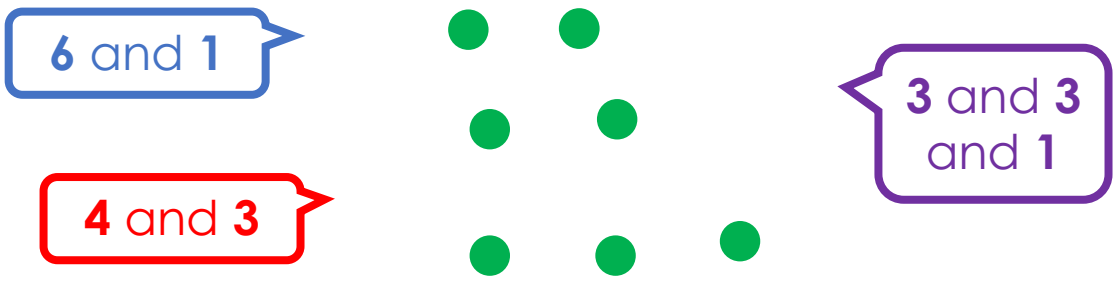
$9 = \square + 5$

$9 = 1 + \square$

$9 = 9 + \square$

Read the Picture

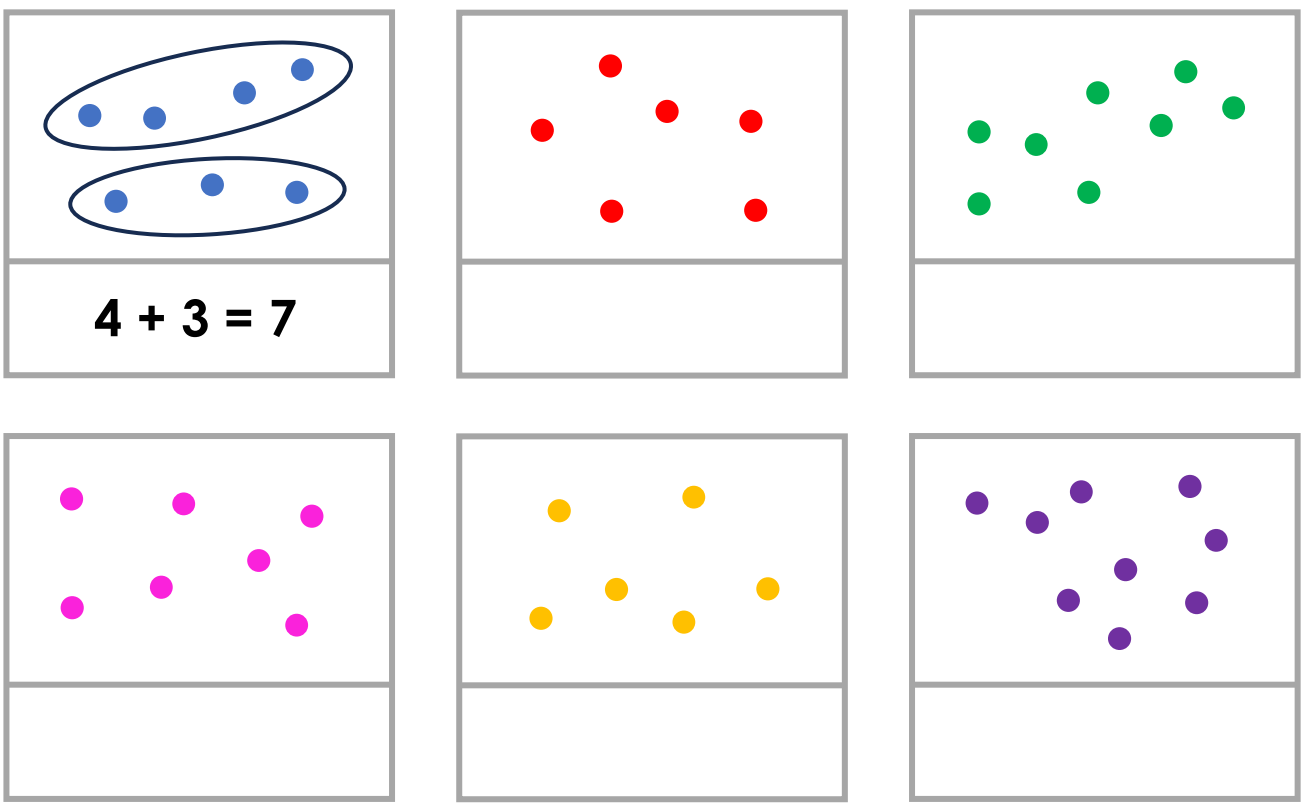
What do you see?



Read the Picture

What do you see?

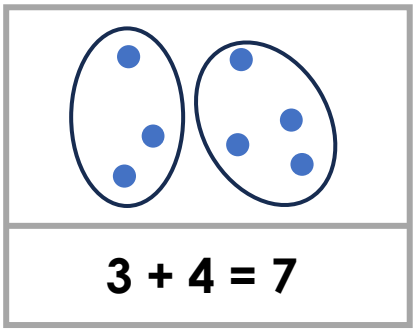
Read the Picture



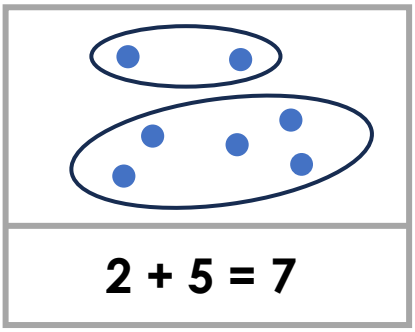
Different Ways

Step 1: show the parts **Step 2:** write the number sentence

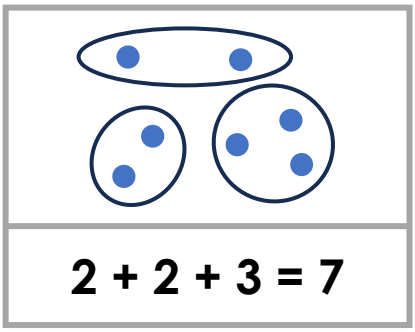
Example:



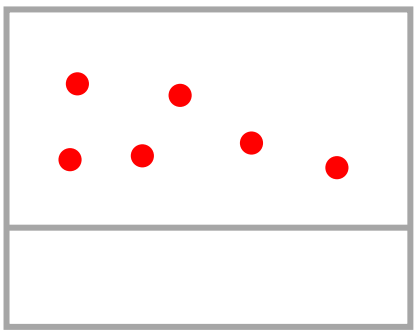
3 + 4 = 7

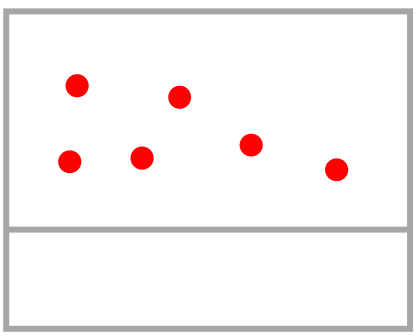


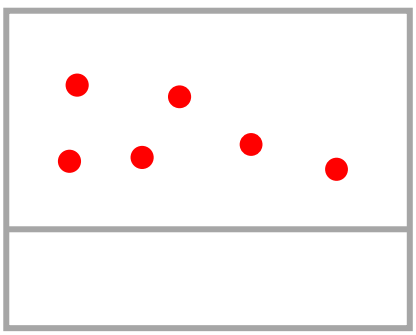
2 + 5 = 7

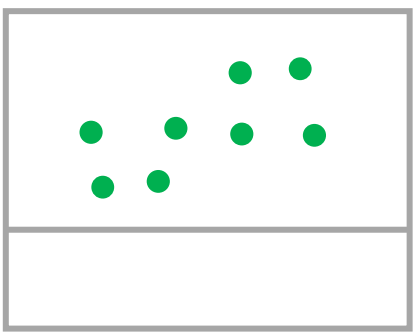


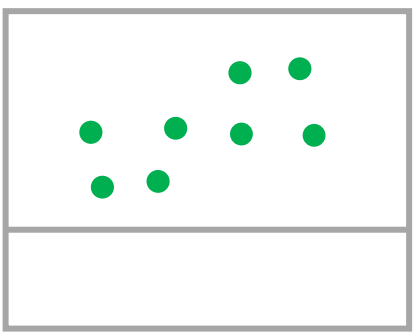
2 + 2 + 3 = 7

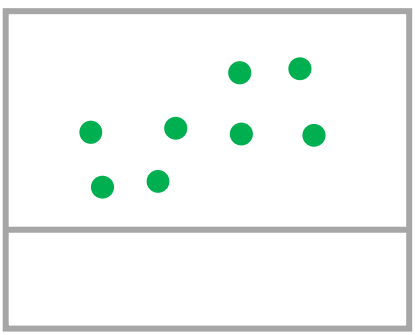


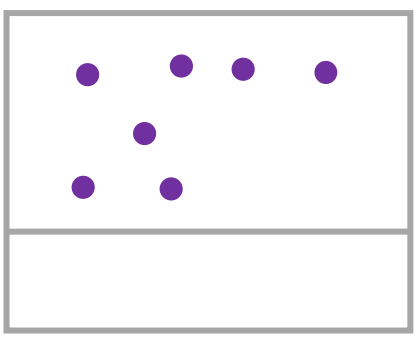


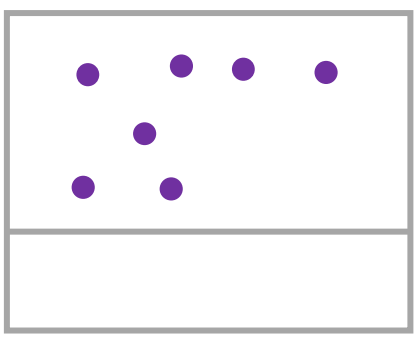


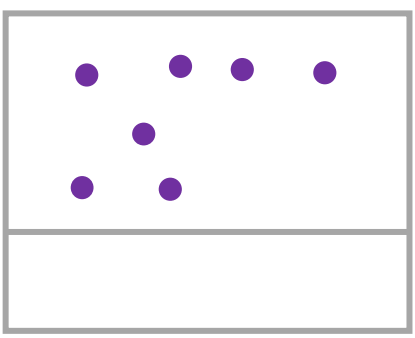








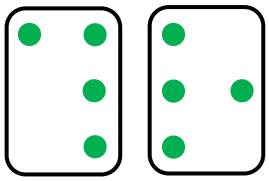




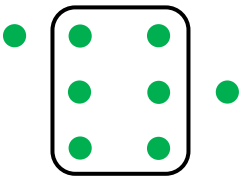
Different Ways

Step 1: show the parts **Step 2:** write the number sentence

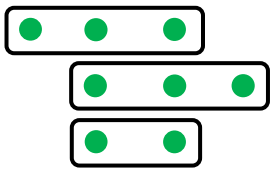
Example:



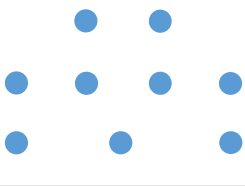
4 + 4 = 8

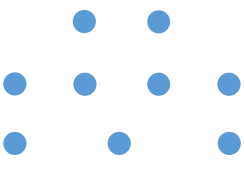


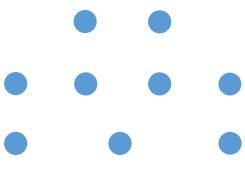
6 + 2 = 8

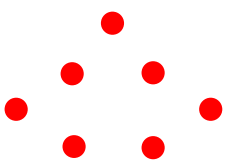


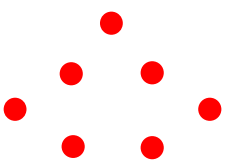
3 + 3 + 2 = 8

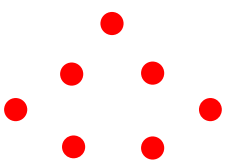






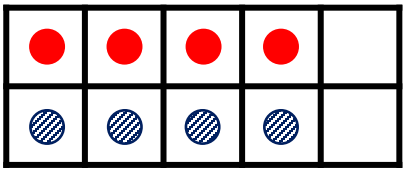




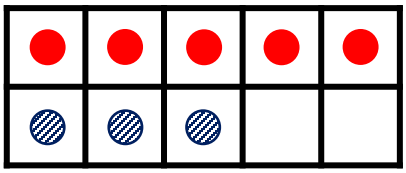


Explain

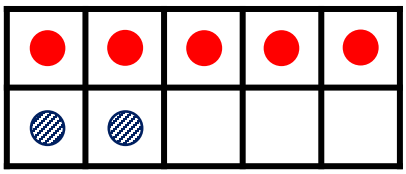
What's the same? What's different?



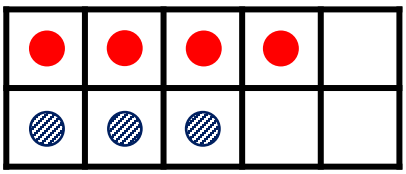
□ + □ = □



□ + □ = □



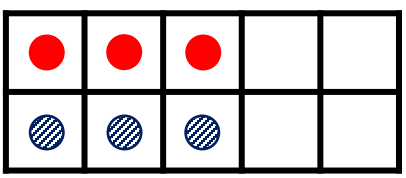
□ + □ = □



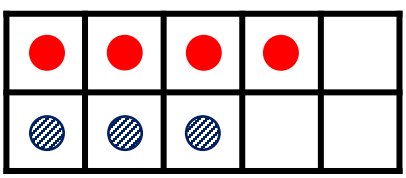
□ + □ = □

Explain

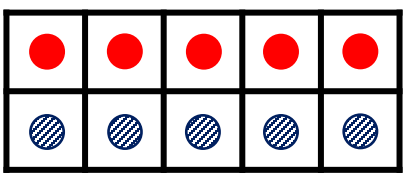
What's the same? What's different?



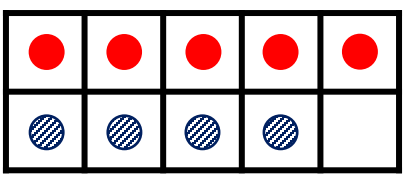
□ + □ = □



□ + □ = □

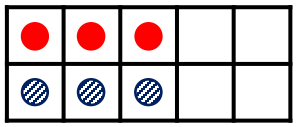


□ + □ = □



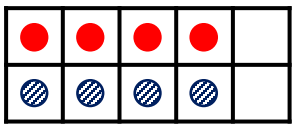
□ + □ = □

I know… so…



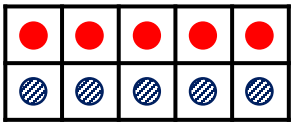
3 + 3 = 6

so 4 + 3 = ☐



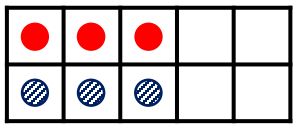
4 + 4 = 8

so 5 + 4 = ☐



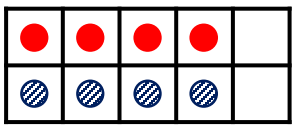
5 + 5 = 10

so 5 + 6 = ☐



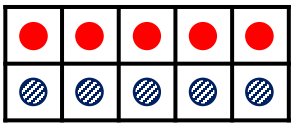
3 + 3 = 6

so 4 + 2 = ☐



4 + 4 = 8

so 3 + 4 = ☐



5 + 5 = 10

so 5 + ☐ = 8

I know… so…

3 + 3 = 6

so 2 + 3 = ☐

4 + 4 = 8

so 3 + ☐ = 8

5 + 5 = 10

so 7 + 5 = ☐

4 + 4 = 8

so 4 + 3 = ☐

5 + 5 = 10

so ☐ + 6 = 10

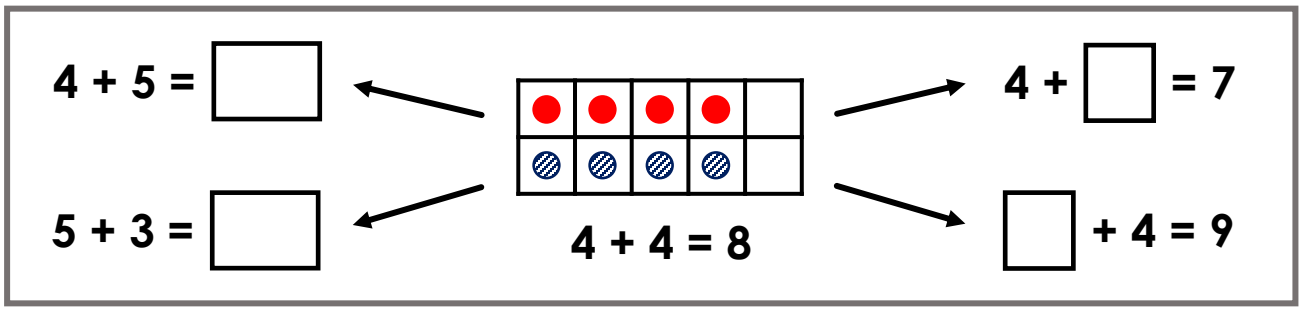
5 + 5 = 10

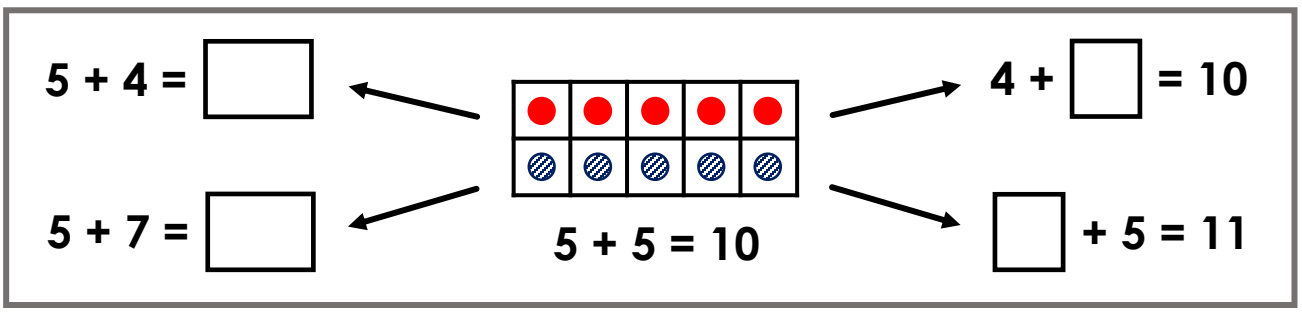
so 5 + 6 = ☐

Small Difference Questions

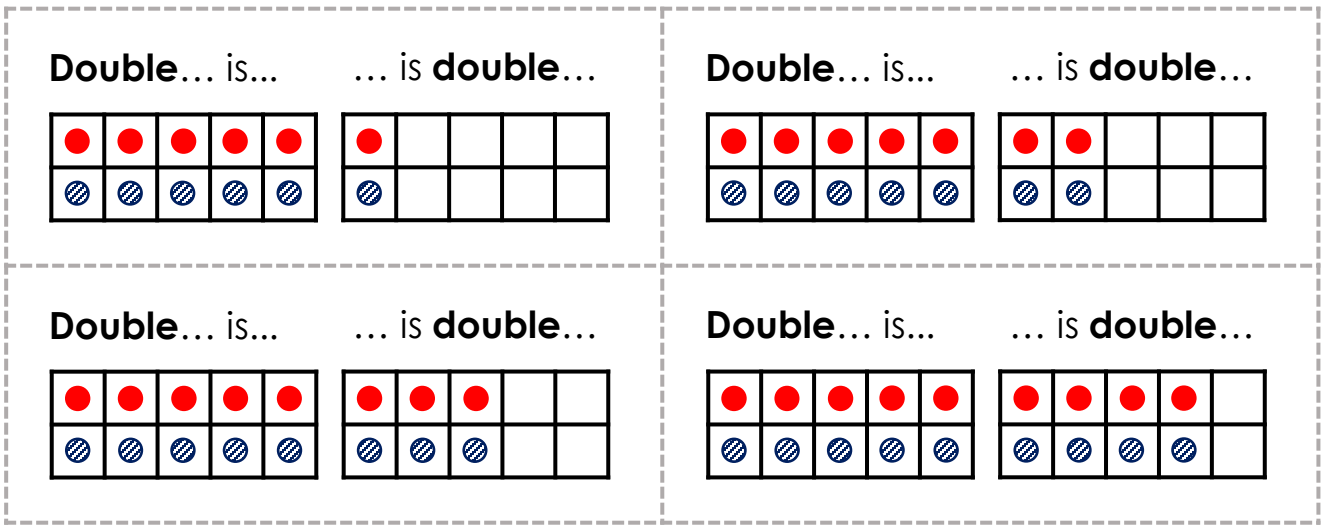
5 + 5 =	4 + 4 =	5 + 5 =
5 + 4 =	5 + 3 =	6 + 4 =
4 + 5 =	4 + 3 =	7 + 4 =

I know… so…

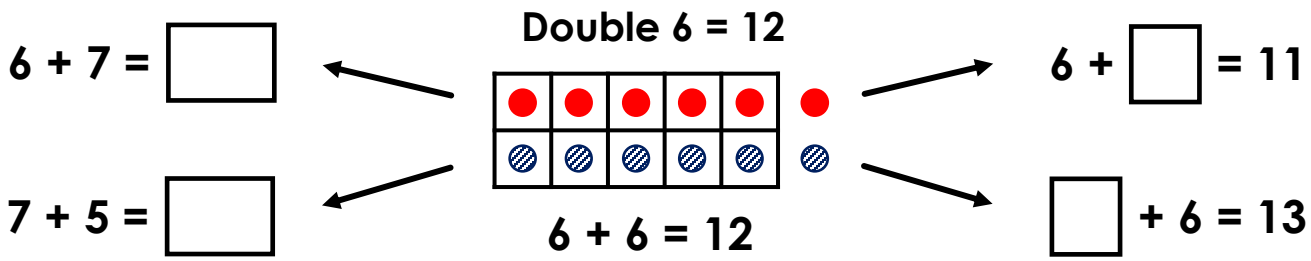




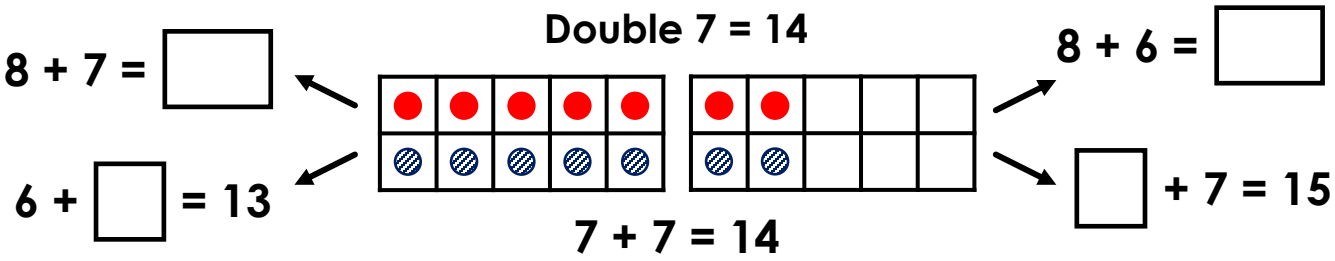
Read the Pictures



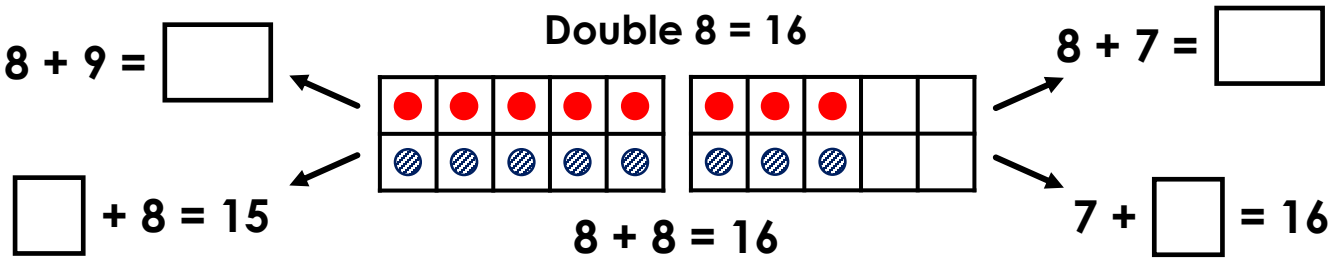
I know… so…



I know… so…



I know… so…



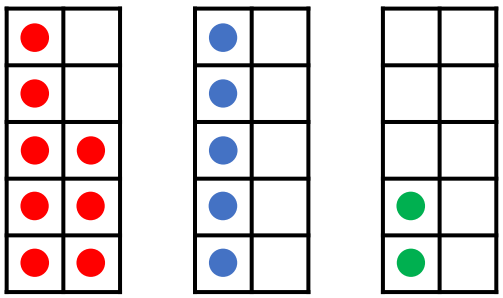
Small Difference Questions

5 + 5 =	6 + 6 =	7 + 7 =
6 + 4 =	7 + 7 =	6 + 7 =
4 + 6 =	7 + 6 =	6 + 8 =
4 + 7 =	8 + 6 =	5 + 9 =

Small Difference Questions

5 + 5 =	6 + 6 =	7 + 7 =
7 + 5 =	5 + 7 =	7 + 9 =
8 + 6 =	5 + 8 =	6 + 8 =

Read the Picture

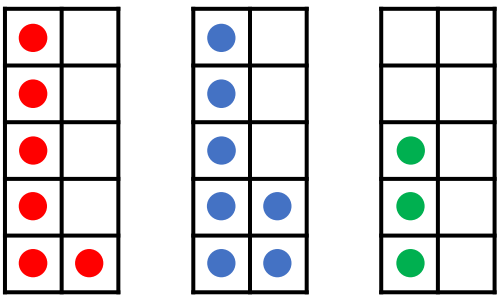


8 5 2

Add ☐ + ☐ first

8 + 5 + 2 = ☐

Read the Picture

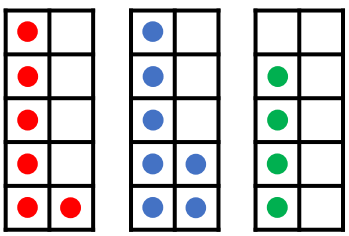


6 7 3

Add ☐ + ☐ first

6 + 7 + 3 = ☐

Explain



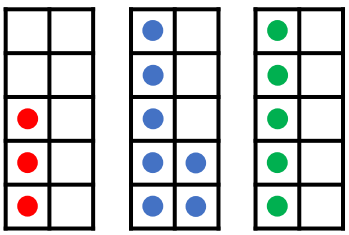
6 7 4

Add ☐ + ☐ first

6 + 7 + 4 = ☐

3 + 5 + 5 = ☐

Add ☐ + ☐ first



3 7 5

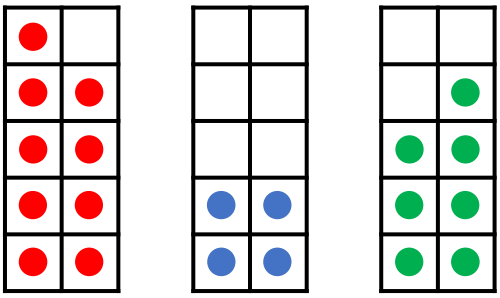
Add ☐ + ☐ first

3 + 7 + 5 = ☐

2 + 4 + 8 = ☐

Add ☐ + ☐ first

Explain



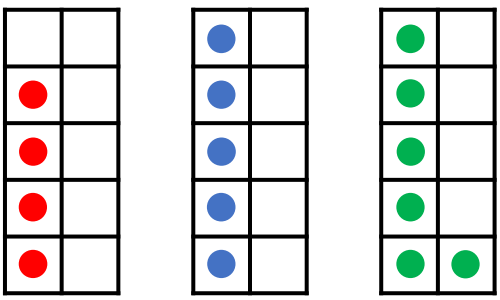
First, add… and…

Move the dots to make…

My way is to…

9 + 4 + 7 = ☐

Explain



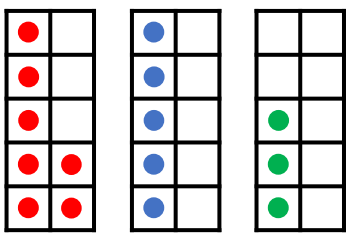
First, add… and…

Move the dots to make…

My way is to…

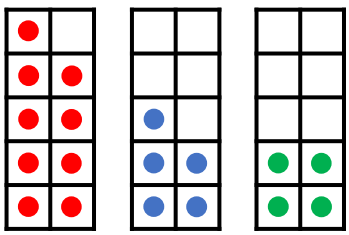
4 + 5 + 6 = ☐

Read the Pictures



7 + 5 + 3 = ☐

My method:



9 + 5 + 4 = ☐

My method:

I know… so…

Example:

4 + 4 = 8

4 + 3 + 1 = 8

5 + 5 = 10

5 + □ + □ = 10

3 + 7 = 10

3 + □ + □ = 10

6 + 5 = 11

□ + □ + □ = 11

7 + 7 = 14

□ + □ + □ = 14

Explain the Mistake

Answer using three of the digits:

□ + □ + □ = 8

1 3 5 2 4 6

6 + 1 + 1 = 8

How Many Ways?

□ + □ + □ = 10

Answer using three of the digits:

1 3 5 7 2 4 6 8

Level 1: *Find an answer*

Level 2: *Find different answers*

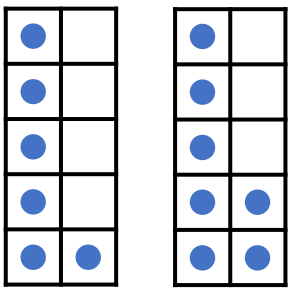
Level 3: *Find all the answers*

1	2	3	4	5	6	7	8

Different Ways

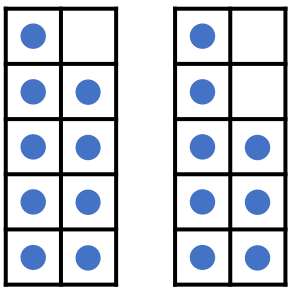
How many dots? *No counting!*

First, I count the 5s



I made a 10

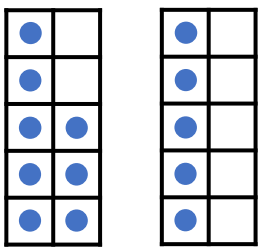
I move one dot

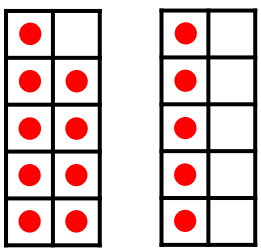


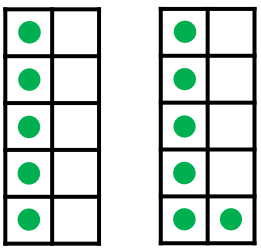
I count the gaps

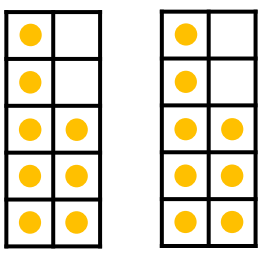
Explain

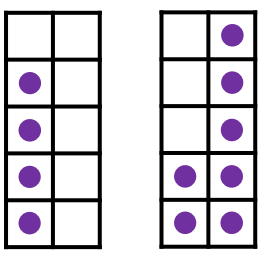
How many dots? *No counting!*

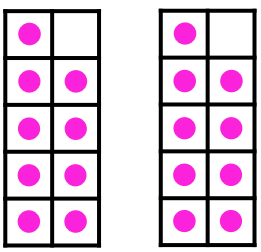
 ☐ dots

 ☐ dots

 ☐ dots

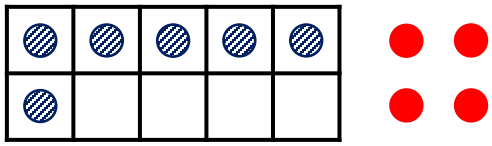
 ☐ dots

 ☐ dots

 ☐ dots

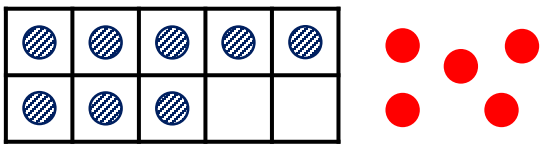
Explain the Mistakes

$6 + 4 = \square$



Partition 4 into 3 and 1

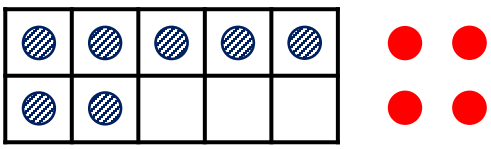
$8 + 5 = \square$



Partition 5 into 1 and 4

Which Answer?

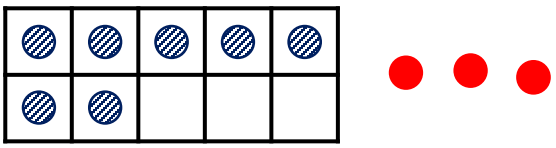
$7 + 4 = \square$



Partition 4 into 2 and 2

Partition 4 into 3 and 1

$7 + 3 = \square$

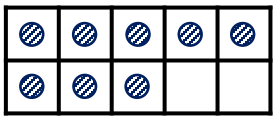


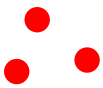
Partition 3 into 2 and 1

Do not partition 3

Read the Pictures

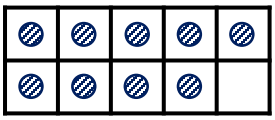
Partition 3 into ☐ and ☐

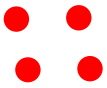




8 + 3 = ☐

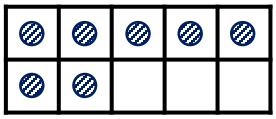
Partition 4 into ☐ and ☐

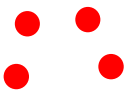




9 + 4 = ☐

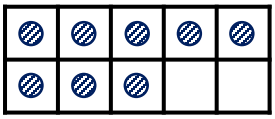
Partition 4 into ☐ and ☐

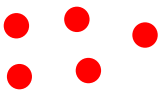




7 + 4 = ☐

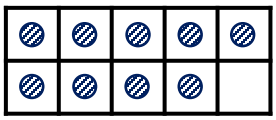
Partition 5 into ☐ and ☐





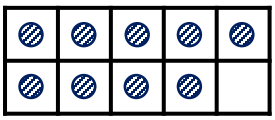
8 + 5 = ☐

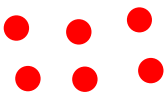
Partition 3 into ☐ and ☐



9 + 3 = ☐

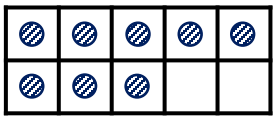
Partition 6 into ☐ and ☐

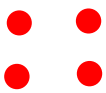




9 + 6 = ☐

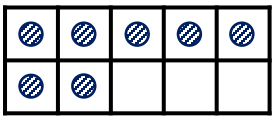
Partition 4 into ☐ and ☐

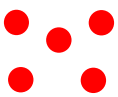




8 + 4 = ☐

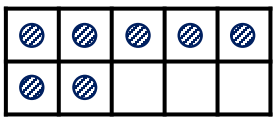
Partition 5 into ☐ and ☐

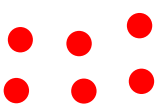




7 + 5 = ☐

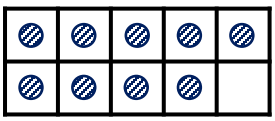
Partition 6 into ☐ and ☐

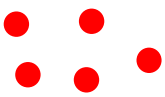




7 + 6 = ☐

Partition 5 into ☐ and ☐

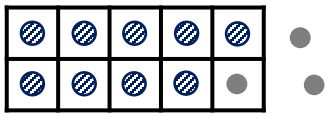




9 + 5 = ☐

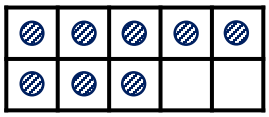
Finish the Pictures

9 + 3 = 12



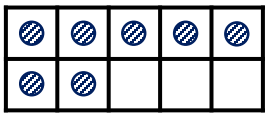
9 + 1 + 2

8 + 5 = ☐



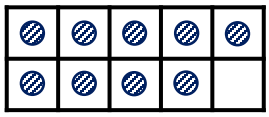
8 + ☐ + ☐

7 + 4 = ☐



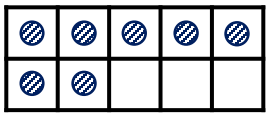
7 + ☐ + ☐

9 + 4 = ☐



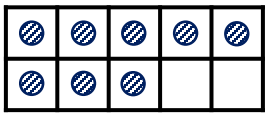
9 + ☐ + ☐

7 + 5 = ☐



7 + ☐ + ☐

8 + 3 = ☐

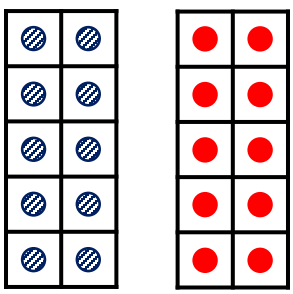


8 + ☐ + ☐

Different Ways

7 + 5 = ☐

I did 5 + 5 + ☐



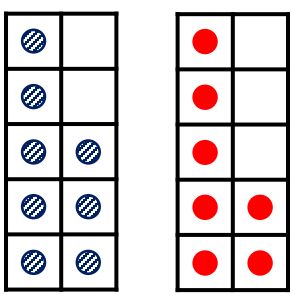
I did 7 + 3 + ☐

I did double ☐

Explain

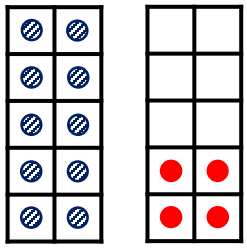
8 + 7 = ☐

I made a 10



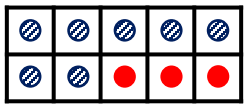
I used a doubles fact

I know... so...



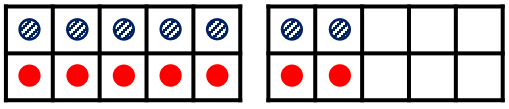
10 + 4 = 14

9 + 4 = ☐



7 + 3 = 10

7 + 4 = ☐



7 + 7 = 14

7 + 8 = ☐

I know... so...

10 + 3 = 13

9 + 3 = ☐

6 + 6 = 12

6 + 5 = ☐

5 + 5 = 10

7 + 5 = ☐

6 + 6 = 12

7 + 6 = ☐

10 + 6 = 16

6 + 10 = ☐

2 + 8 = 10

3 + 8 = ☐

6 + 4 = 10

7 + 4 = ☐

7 + 7 = 14

7 + 6 = ☐

7 + 7 = 14

8 + 6 = ☐

Small Difference Questions

10 + 3 =

9 + 3 =

9 + 4 =

9 + 5 =

6 + 6 =

7 + 6 =

6 + 7 =

6 + 8 =

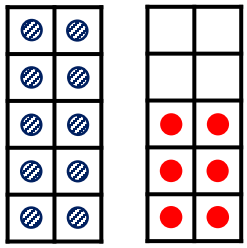
7 + 3 =

7 + 4 =

4 + 7 =

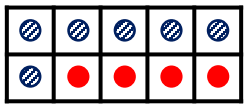
5 + 6 =

I know... so...



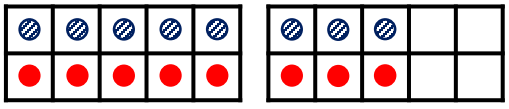
10 + 6 = 16

9 + 6 = ☐



6 + 4 = 10

6 + 5 = ☐



8 + 8 = 16

9 + 8 = ☐

I know... so...

10 + 5 = 15

9 + 5 = ☐

9 + 9 = 18

9 + 8 = ☐

7 + 5 = 12

8 + 5 = ☐

7 + 7 = 14

7 + 8 = ☐

6 + 10 = 16

6 + 9 = ☐

3 + 7 = 10

2 + 8 = ☐

4 + 6 = 10

5 + 6 = ☐

8 + 8 = 16

8 + 7 = ☐

8 + 8 = 16

9 + 7 = ☐

Small Difference Questions

6 + 10 =

6 + 9 =

9 + 6 =

8 + 6 =

6 + 6 =

7 + 7 =

8 + 7 =

9 + 6 =

7 + 3 =

7 + 4 =

7 + 5 =

8 + 4 =

Which Answer?

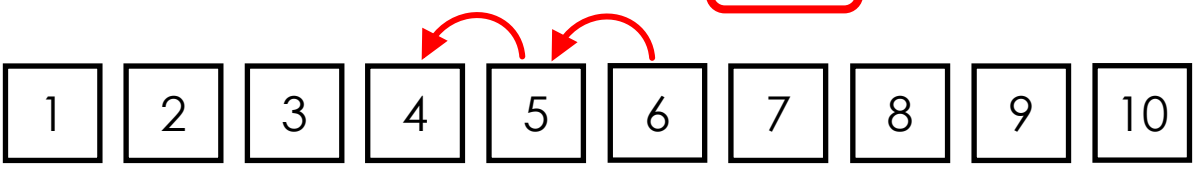
6 – 2 = 5

6, **5**

OR

6 – 2 = 4

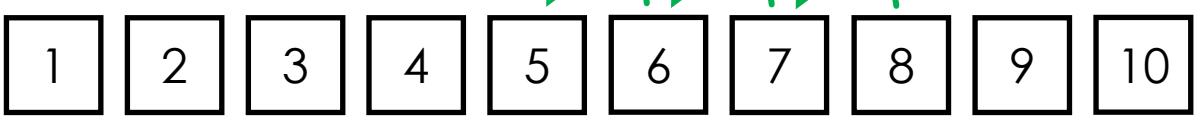
6, **5**



Which Answer?

8 – 3 = 5

8, 7, **6**

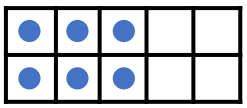


OR

8 – 3 = 6

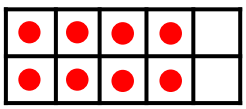
8, 7, **6**

Explain



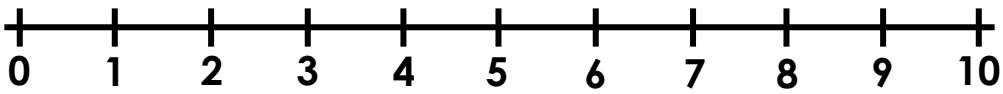
6 – 1 =

For this question, **I do** count backwards because…



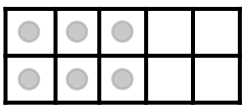
8 – 7 =

For this question, **I do not** count backwards because…



Read the Pictures

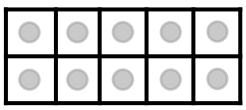
For each question, **do you count backwards?**



6 – 6 =

Did you count backwards?

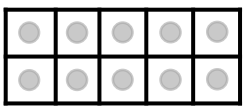
YES NO



7 – 2 =

Did you count backwards?

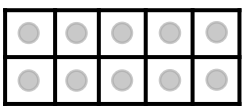
YES NO



5 – 4 =

Did you count backwards?

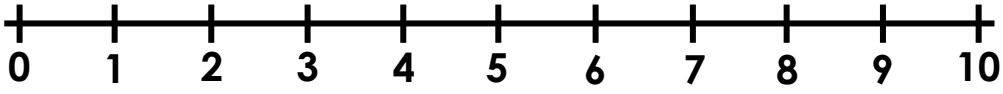
YES NO



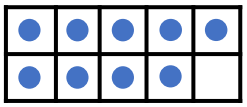
8 – 1 =

Did you count backwards?

YES NO

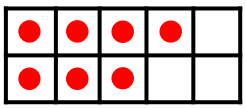


Explain



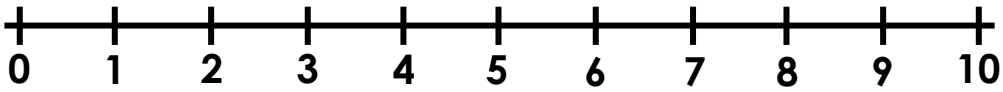
9 – 1 =

The dot I visualize subtracting is…



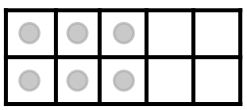
7 – 6 =

The dots I visualize subtracting are…

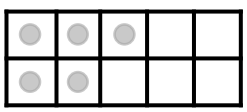


Read the Pictures

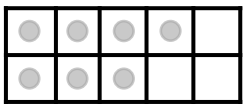
Answer **without** crossing out the dots:



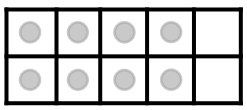
6 – 5 =



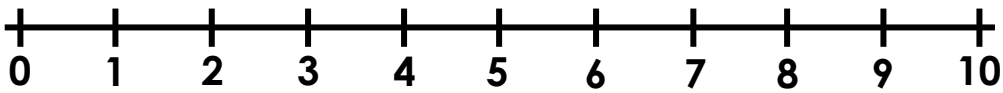
5 – 1 =



7 – 1 =

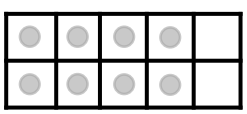


8 – 8 =

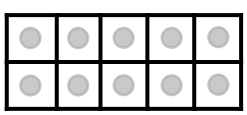


Read the Pictures

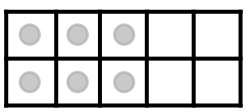
Answer **without** crossing out the dots:



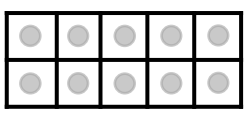
8 – 7 =



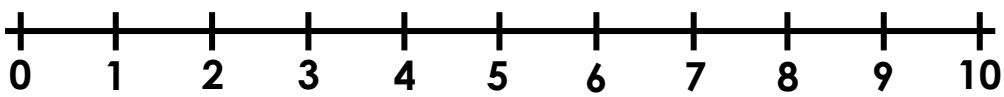
10 – 9 =



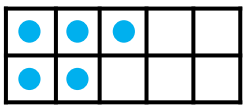
6 – 1 =



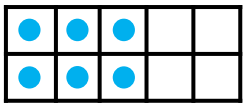
10 – 9 =



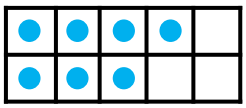
Spot the Pattern



5 – 3 =

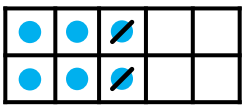


6 – 4 =



7 – 5 =

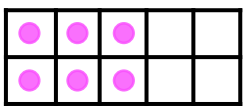
Example:



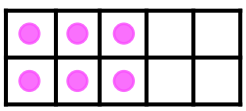
6 – 2 = 4

What do you notice?

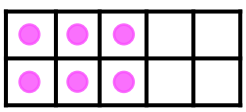
Spot the Pattern



6 – 3 =

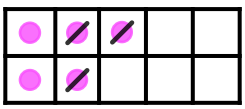


6 – 4 =



6 – 5 =

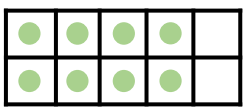
Example:



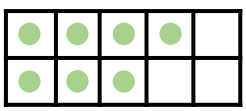
5 – 3 = 2

What do you notice?

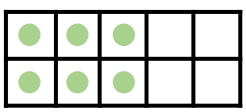
Spot the Pattern



8 – 4 =

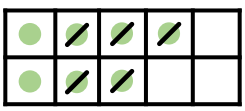


7 – 3 =



6 – 2 =

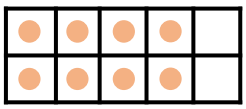
Example:



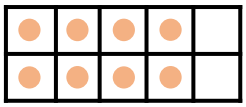
7 – 5 = 2

What do you notice?

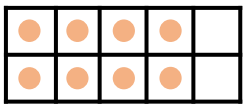
Spot the Pattern



8 – 4 =

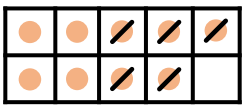


8 – 5 =



8 – 6 =

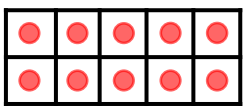
Example:



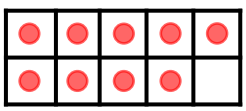
9 – 5 = 4

What do you notice?

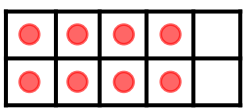
Spot the Pattern



10 – 6 =

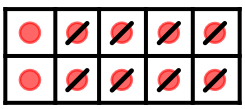


9 – 5 =



8 – 4 =

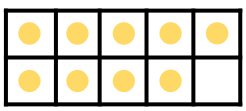
Example:



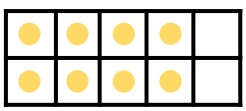
10 – 2 = 8

What do you notice?

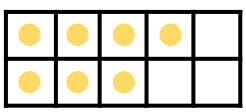
Spot the Pattern



9 – 6 =

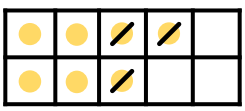


8 – 6 =



7 – 6 =

Example:



7 – 3 = 4

What do you notice?

Explain the Mistake

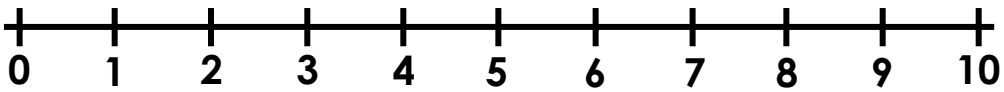
Answer using two of the digits:

□ – □ = 1

2 4 5

4 – 5 = 1

Give the correct answer.



Extend

Answer using **two** of the digits:

□ – □ = 1

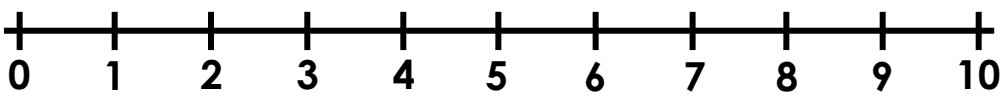
5 6 3

□ – □ = 1

7 5 8

□ – □ = 2

3 4 6



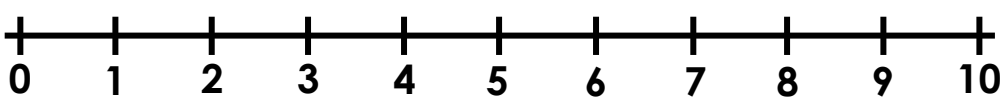
Different Ways

Answer using **four** of the digits:

□ – □ = 3

□ – □ = 3

2 4 7 5 6

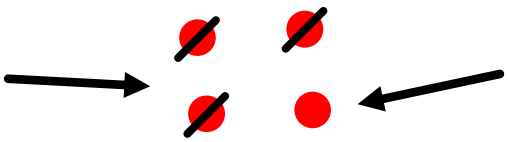


Read the Picture

Ben had 4 sweets. Then, he ate 3 sweets.

How many sweets did Ben have left?

The dots that are crossed off represent…



The dot that is not crossed off represents…

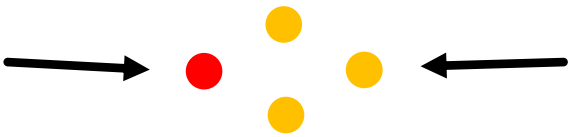
Read the Picture

There were 4 people sat at the table.

There was 1 adult and some children.

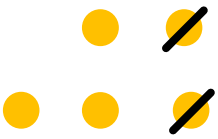
How many children were sat at the table?

The red dot represents…



The yellow dot represents…

Finish the Question

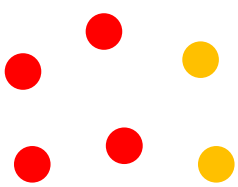


There were 5 eggs in a box.

Then, 2 eggs _____

How many _____

Finish the Question



There are 6 children at the park.

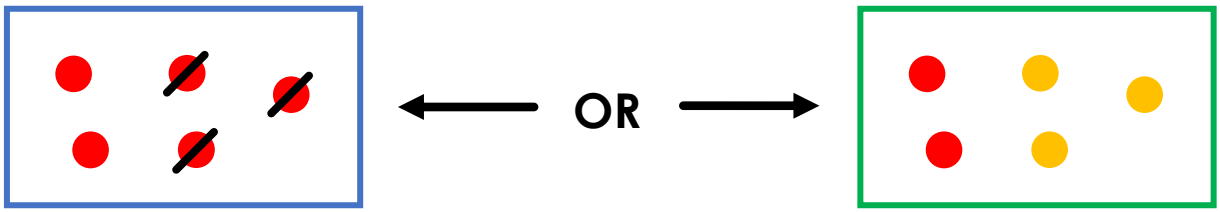
There are 4 _____

How many _____

Which Picture?

There were 5 balloons. Then, 3 balloons popped.

How many balloons are there now?

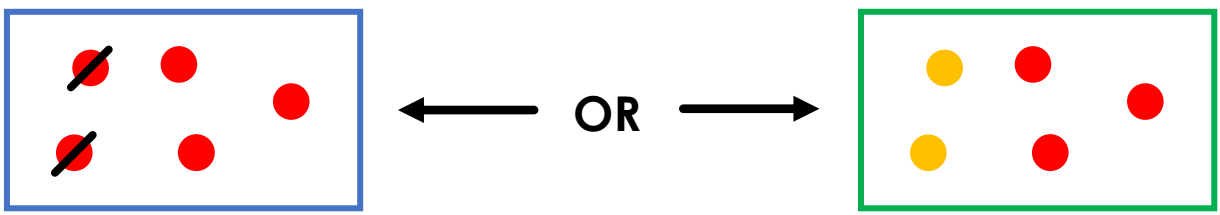


Which Picture?

There are 5 children in the playground.

2 of the children are wearing a coat.

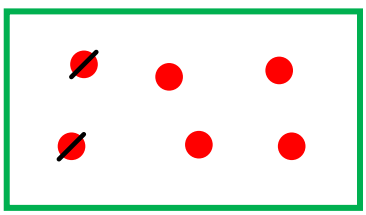
How many children are not wearing a coat?

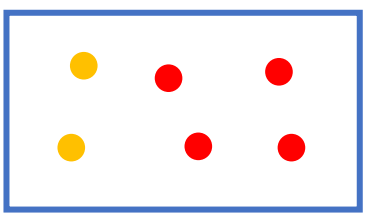


Which Picture

Match the stories to the pictures.

Jen has 6 cats.
2 of her cats are inside.
How many cats are outside?





Tom had 6 sweets.
Then, he ate 2 sweets.
How many sweets are left?