Task A

Part A

Which shapes are three-quarters blue?
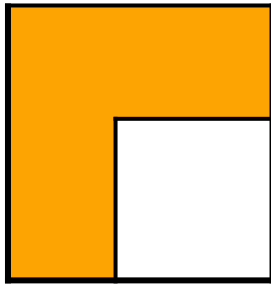

$$\frac{3}{4}$$
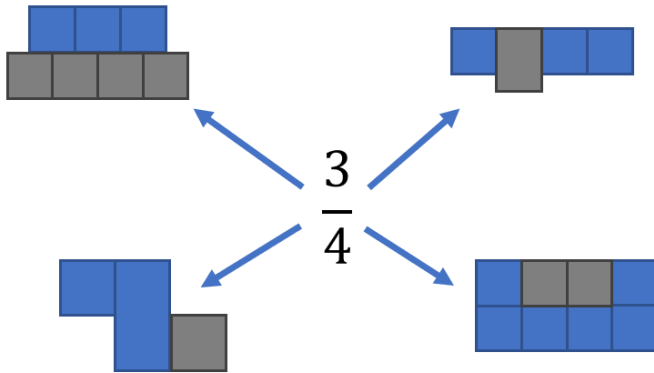
Part B

Shape A   **Shape B**

Which shape has the **larger fraction shaded?**
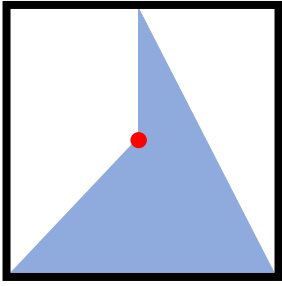
Explain.

Part C

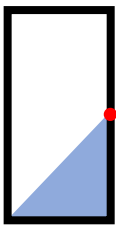*Shade in $\frac{1}{4}$ of each shape:*

Task B

Part A

What fraction of the square is blue?
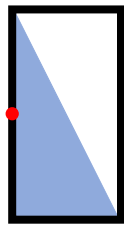
The red spot is in the middle of the square.

Part B

Explain the mistake:

'To answer Part A, I split the shape into two triangles. I worked out the fraction of each triangle and added these fractions. The answer is $\frac{3}{4}$.'
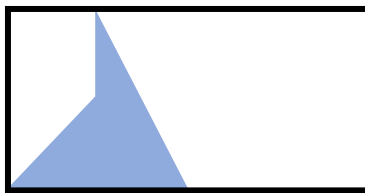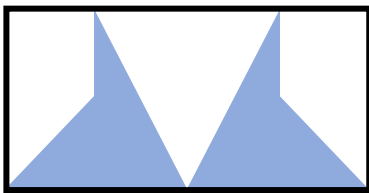

$\frac{1}{4}$

$\frac{1}{2}$

$\frac{1}{4} + \frac{1}{2} = \frac{3}{4}$

Part C

What fraction of each shape is shaded?

Answers

Task A Part A: Top two examples are incorrect, bottom two examples are correct.

Task A Part B: Shape A is $\frac{3}{4}$ shaded. Despite having a larger shaded part, shape B is less than $\frac{3}{4}$ shaded. The white part of shape B is more than $\frac{1}{4}$ of the shape.

Task A Part C: Note that the cross can't be split into squares because it is made of 5 squares, unlike the z shape which naturally splits into 4 squares.

Task B Part A: $\frac{3}{8}$ which can be found by breaking the shape into $\frac{1}{4}$ and $\frac{1}{8}$ with a vertical line.

Task B Part B: In both examples the size of the whole has been changed so the fractions added are incorrect.

Task B Part C: $\frac{3}{8}$ (equivalent) and $\frac{3}{16}$ (the whole has been doubled in size)