# 6 <br> POSITION AND DIRECTION 



From White Rose Maths schemes for Year 6 Autumn Term BLOCK 4 - POSITION AND DIRECTION


Write the coordinates of point A.


Plot the points $B$ and $C$ on the grid.

$$
B(4,4) \quad C(7,4)
$$

Join up the three points to make a triangle. What type of triangle have you drawn?

2 Teddy is drawing a rectangle on a grid. He plots three of the vertices.


Write the coordinates of the three vertices Teddy has plotted.


Plot the final vertex of the rectangle.
What are the coordinates of the final vertex?


3


Translate triangle $S, 4$ units right and 2 units down. Label your triangle $T$.

4


Reflect the shape in the $y$ axis.

5


Eva is asked to translate shape A 4 units right and 2 units up.
She labels her new shape B.
Explain why Eva's translation is wrong.

What are the coordinates of the correctly translated shape?



On the grid, draw the shape with vertices at $(-4,-4),(-4,-2)$ and $(-1,-4)$

Reflect the shape in the $x$ axis. Label your shape $P$.

Translate shape P 6 units right and 5 units down. Label your new shape $Q$.
(7) A square is drawn on a grid.

Two of its vertices are at $(2,2)$ and $(5,5)$
What is the perimeter of the square?

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## Answers

(1) $(7,6)$


Right-angled triangle
$2(2,6)$
$(6,10)$
$(8,8)$

$(4,4)$
3


4


5 Eva is wrong because she has translated one vertex 4 units right and 2 units up, but then drawn the rest of the shape incorrectly from this vertex.
$(5,5)(7,5)(5,7)(7,7)$
6


712 units

