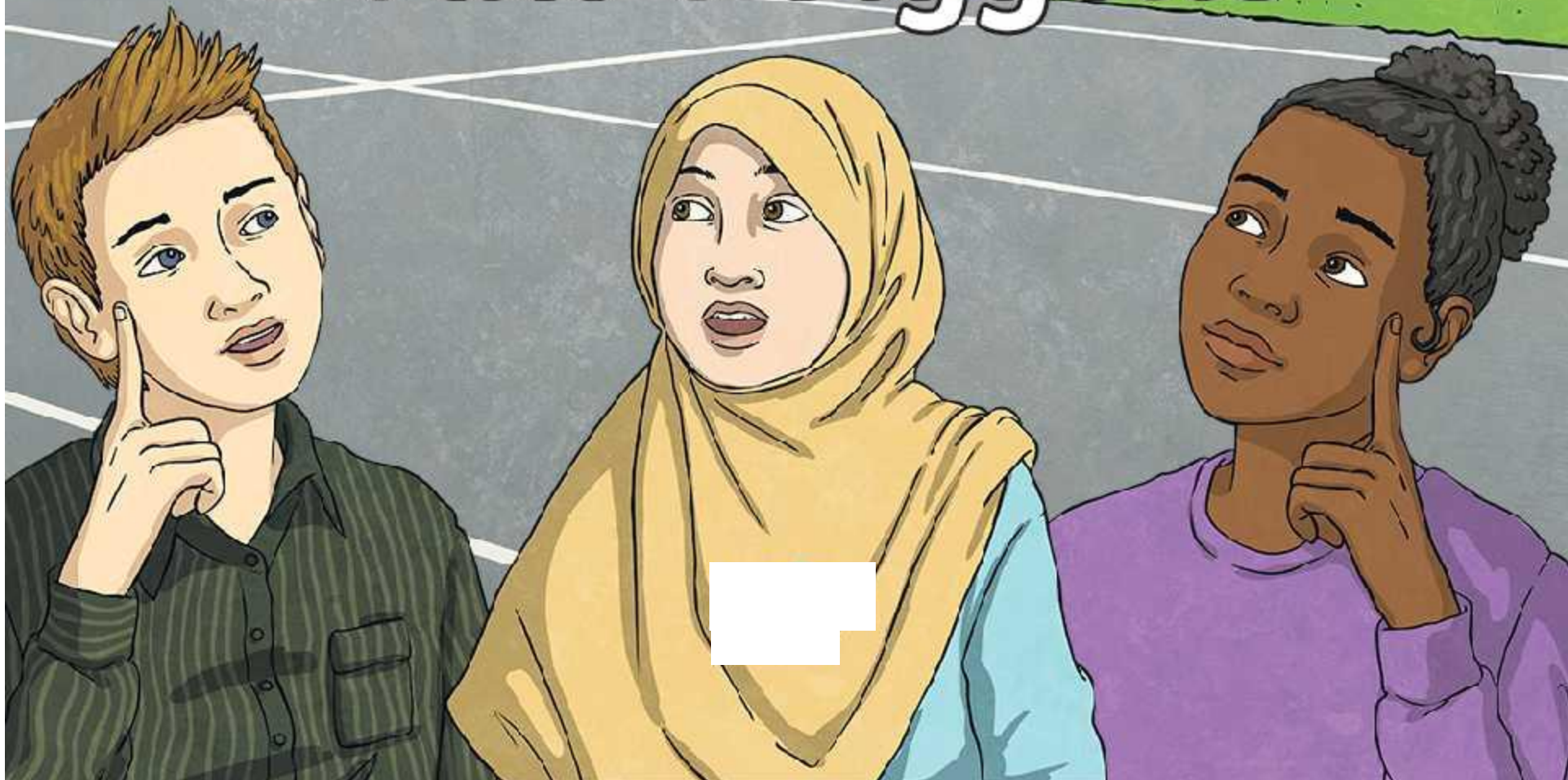
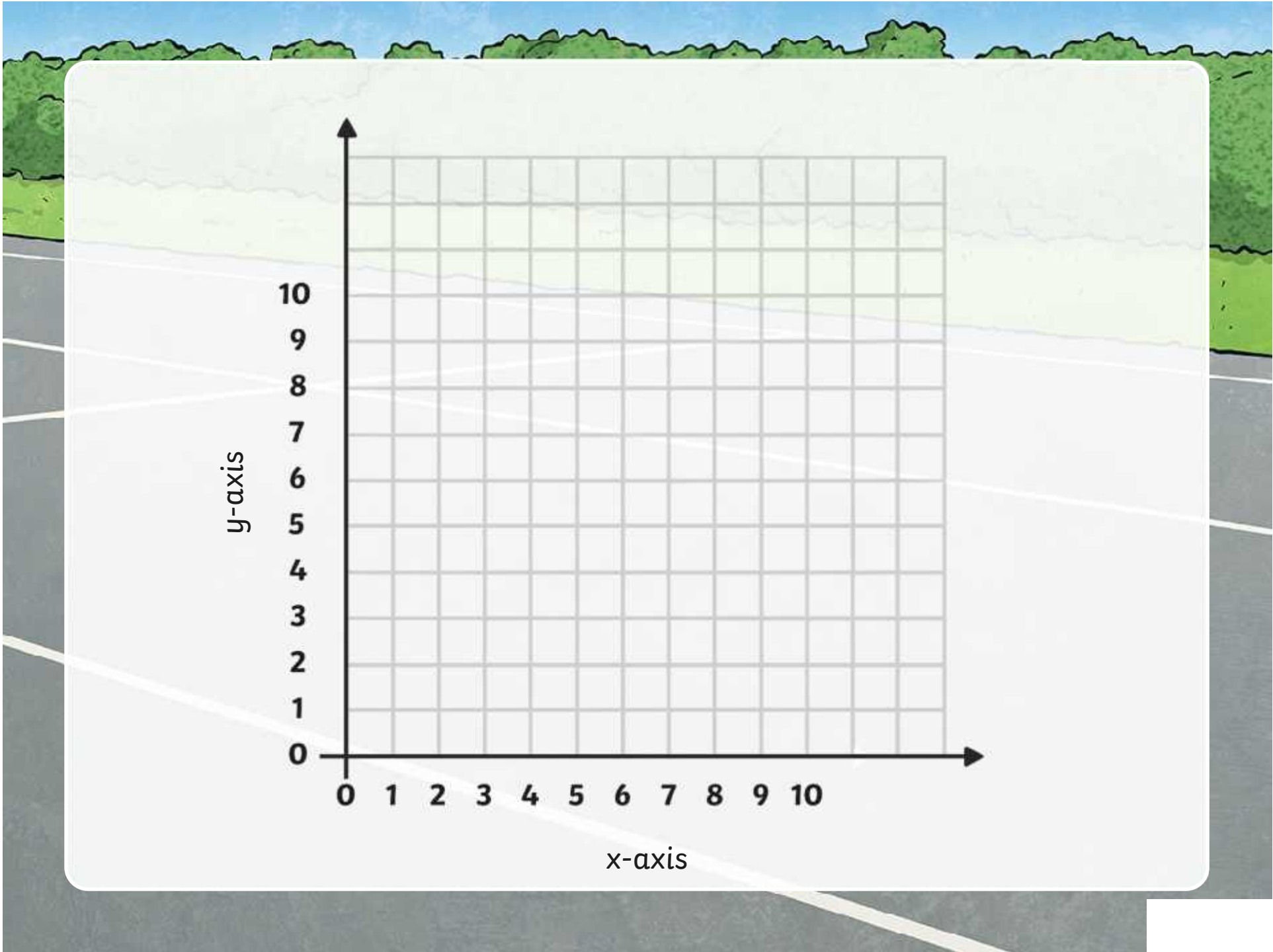


Maths Mastery

Year 4

Draw Polygons





Rectangle

Alfie marks 2 points (A and C) on this coordinates grid.

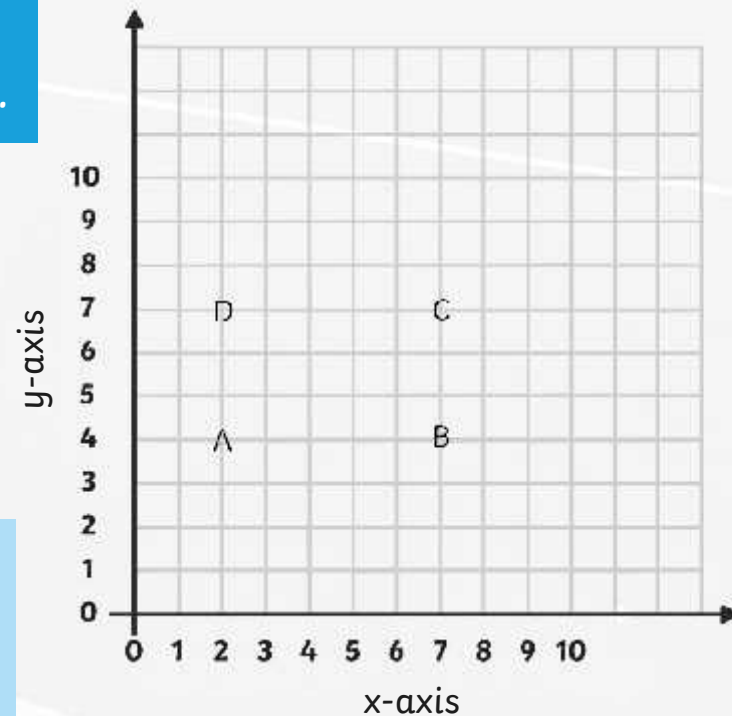
He asks, "What are the coordinates of the other 2 points?"

Find the coordinates of the other points (B and D) and discuss your answers with a partner.

On a coordinates grid, draw 2 corners of a rectangle for a partner to complete.



The other points are (2,7) and (7,4). Either can be B or D.



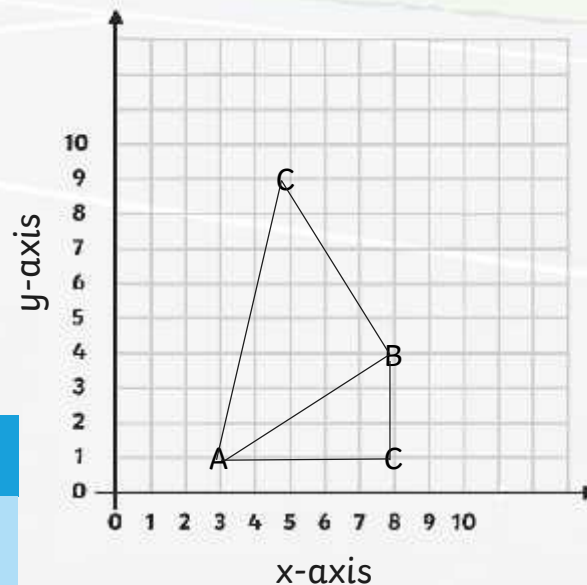
Right-Angled Triangle

Laura marks 2 points (A and B) on the coordinates grid and draws a line to join up the points.

She says, "Are there other possible coordinates for the other vertex of a right-angled triangle?"

Discuss Laura's statement with a partner.
Are there other possible coordinates for the other vertex of a right-angled triangle.

On a coordinates grid, draw 2 vertices of a right-angled triangle for a partner to complete.



C could also be (8,1).

There could be an answer where the line drawn is one of the 2 equal sides of a right-angled isosceles triangle. (5,9)

Can you see another one like this?

(0,6)



Isosceles Triangle

Fatima marks 2 points (A and B) on this coordinates grid and draws a line to join up the points.

She says, "I can finish this isosceles triangle in at least 2 different ways."

Discuss Fatima's statement with a partner. Can you find some of the points where the third point, C, of an isosceles triangle might be?

On a coordinates grid, draw 2 vertices of an isosceles triangle for a partner to complete.

C could also be (8,9) or (2,3)

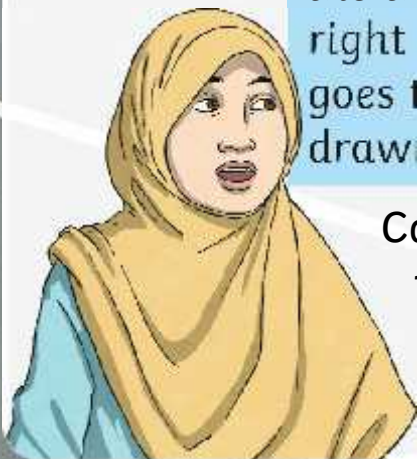
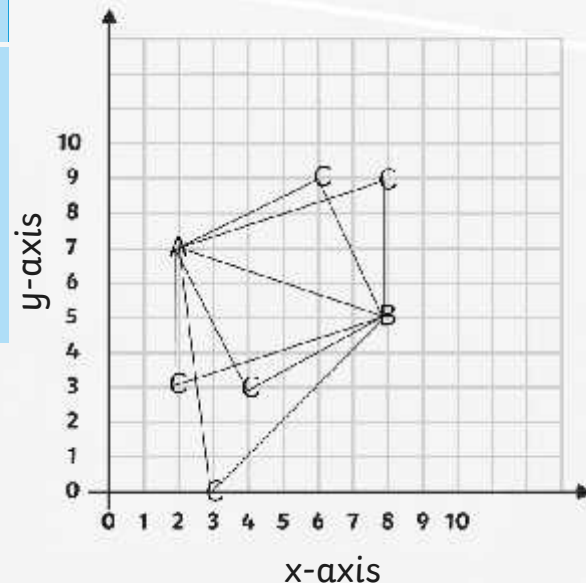
There could also be answers where the third point is on a line drawn at right angles to the drawn line that goes through (5,6) the middle of the drawn line.

Can you see any other points on this line that would make an isosceles triangle?

(3,0)

(4,3)

(6,9)



Symmetrical Pentagons

Alfie marks 3 points on this coordinates grid and says, "I can draw 2 more points to complete a pentagon that has a line of symmetry."

Can you find two other points to make a symmetrical pentagon?

Discuss your ideas with a partner.

Give your partner 3 points from which to find 2 other points to complete a symmetrical pentagon. You can give the coordinates or draw them on a grid.



Points could be
(2,5) and (7,2).

