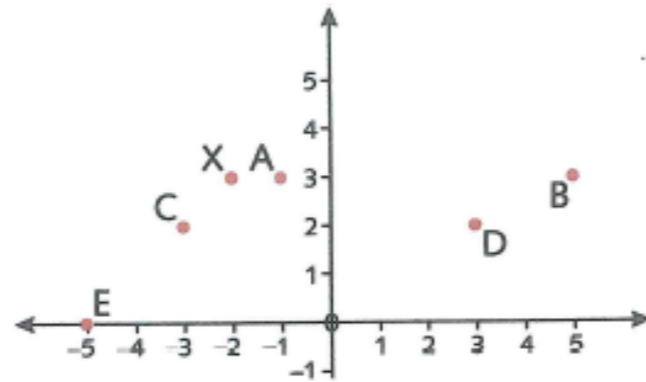


# Using coordinates to locate shapes (1)

Use coordinates to describe positions in two and in four quadrants and predict missing coordinates



**Challenge 1**  
1 The points on the grid represent five footballers on a football pitch. Write the coordinates of players A to E.

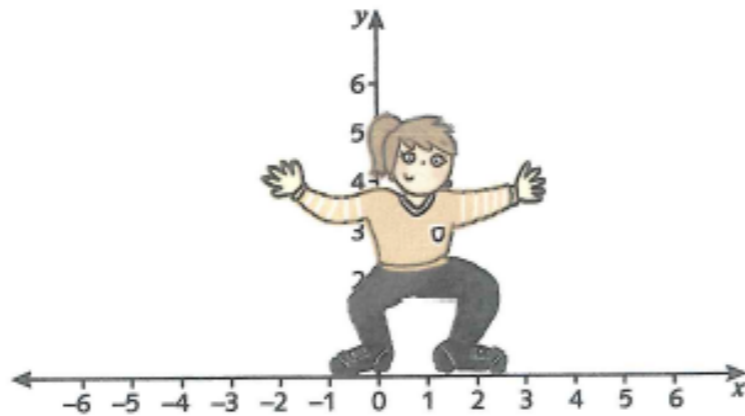


2 The ball is at the point X (-2, 3).

Decide where to position the referee and write the coordinates as R ( , ). Explain your choice.

**Challenge 2**  
1 The Cup Final has gone to a penalty shoot-out.

- The shot is a miss if the goalkeeper covers the coordinates.
- The shot is a goal if the coordinates are not covered by the goalkeeper.



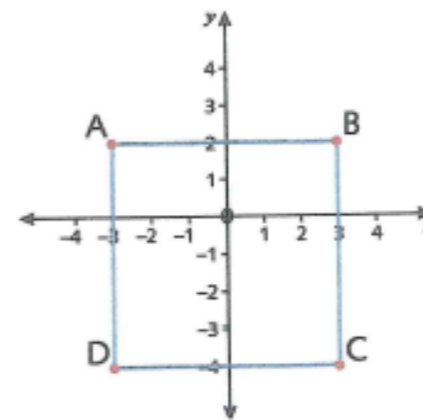
a Copy and complete the score sheet for each team.

Rustean Rovers					
Coordinates of shot	(-2, 4)	(-5, 6)	(3, 4)	(-4, 1)	(2, 2)
Result	miss				
Ashwell United					
Coordinates of shot	(3, 5)	(-6, 1)	(-1, 2)	(3, 4)	(-3, 3)
Result					

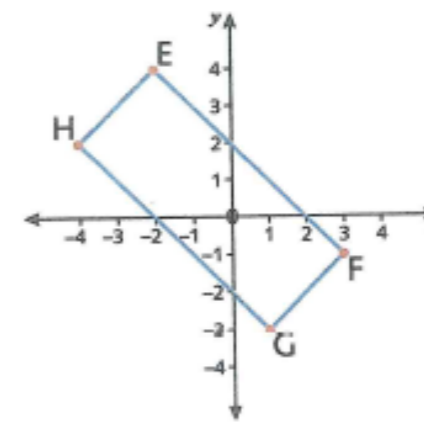
b Which team won the Cup?

2 List the coordinates of the vertices of each shape.

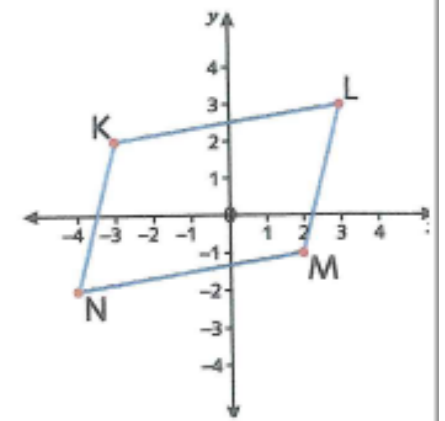
a square ABCD



b rectangle EFGH

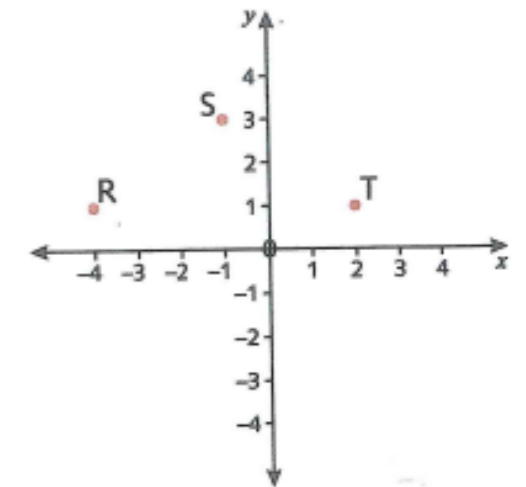


c parallelogram KLMN



3 The points R, S and T form three of the vertices of a rhombus.

What are the coordinates of the fourth vertex U?



**Challenge 3**

1 List the coordinates of the four points that are the vertices of:

- a square
- two parallelograms
- an isosceles triangle with all angles less than  $90^\circ$ .

2 The points D (3, 2) and F (-1, -3) are two vertices of a scalene triangle. Find two different coordinates for the third vertex.

