Varied Fluency
Step 4: Reflections

National Curriculum Objectives:

Mathematics Year 6: (6P3) Describe positions on the full coordinate grid (all four quadrants)
Mathematics Year 6: (6P2) Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Differentiation:

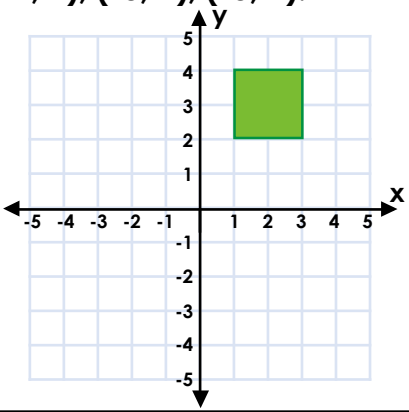
Developing Questions to support reflecting shapes across the x or y axis. Using regular shapes with up to four sides. Single reflections only.
Expected Questions to support reflecting shapes across the x or y axis. Using shapes with up to five sides, where some shapes may be irregular. Some use of multiple reflections.
Greater Depth Questions to support reflecting shapes across the x or y axis. Using irregular shapes with up to six sides and multiple reflections. Including grids of varying scales with some points plotted between increments.

More Year 6 Position and Direction resources.

Did you like this resource? Don't forget to review it on our website.

Reflections

1a. True or false? If this shape is reflected in the y axis, the new coordinates will be (-1, 2), (-1, 4), (-3, 2), (-3, 4).

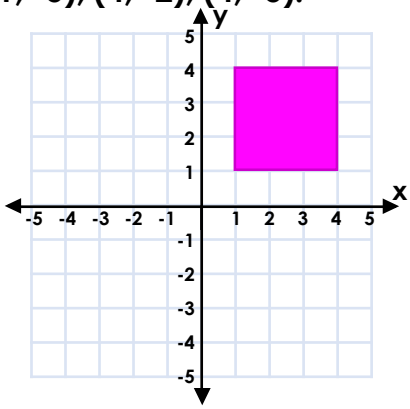


D

VF

Reflections

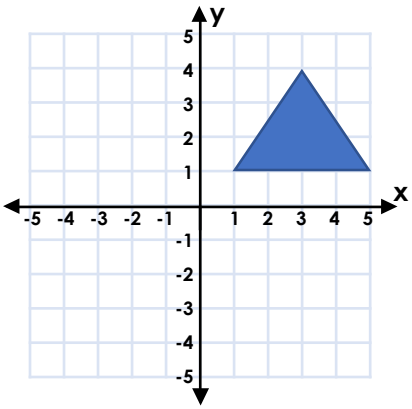
1b. True or false? If this shape is reflected in the x axis, the new coordinates will be (1, -2), (1, -5), (4, -2), (4, -5).



D

VF

2a. Reflect the shape in the x axis and complete the coordinates of the new shape.

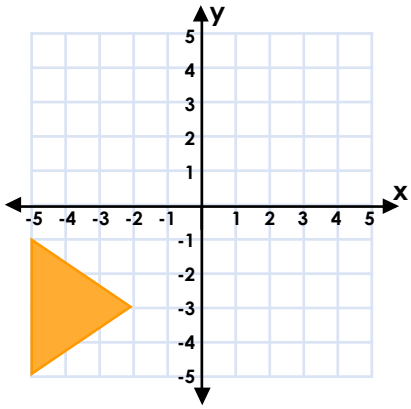


(1,-1)		

D

VF

2b. Reflect the shape in the y axis and complete the coordinates of the new shape.

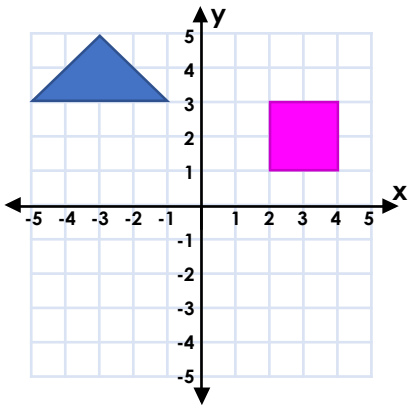


(2,-3)		

D

VF

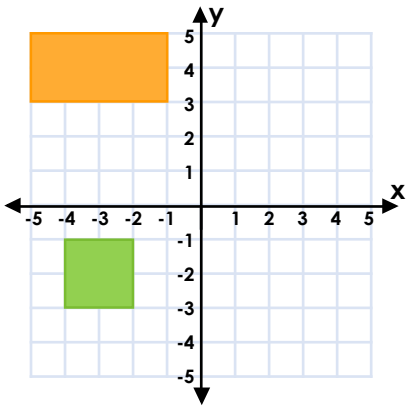
3a. Reflect both shapes in the y axis and draw the new shapes.



D

VF

3b. Reflect both shapes in the x axis and draw the new shapes

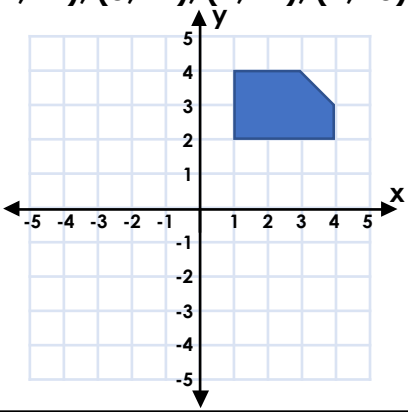


D

VF

Reflections

4a. True or false? If this shape is reflected in the y axis, the new coordinates will be (1, -2), (1, -4), (3, -4), (4, -2), (4, -3).

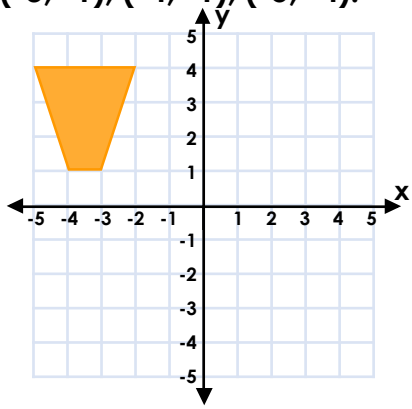


E

VF

Reflections

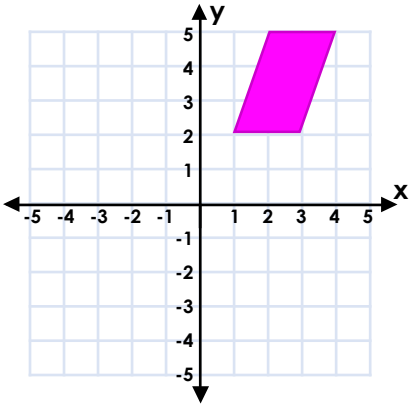
4b. True or false? If this shape is reflected in the x axis, the new coordinates will be (-2, -4), (-3, -1), (-4, -1), (-5, -4).



E

VF

5a. Reflect the shape in the x axis and complete the coordinates of the new shape.

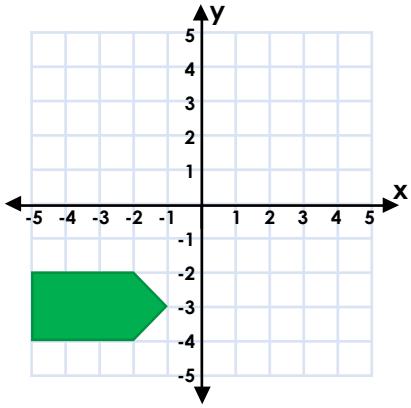


(1,-2)			

E

VF

5b. Reflect the shape in the y axis and complete the coordinates of the new shape.

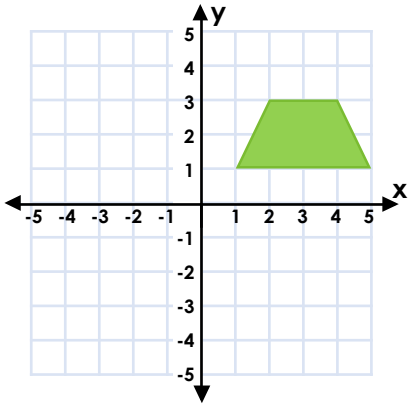


(1,-3)				

E

VF

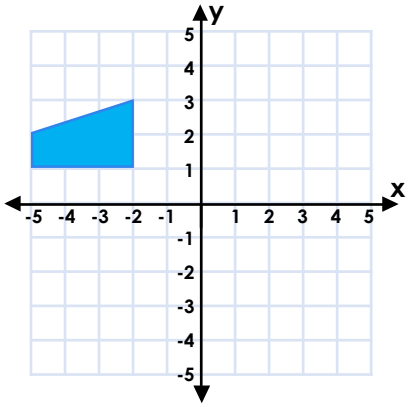
6a. Reflect the shape in the y axis. Then reflect both shapes in the x axis.



E

VF

6b. Reflect the shape in the y axis. Then reflect both shapes in the x axis.

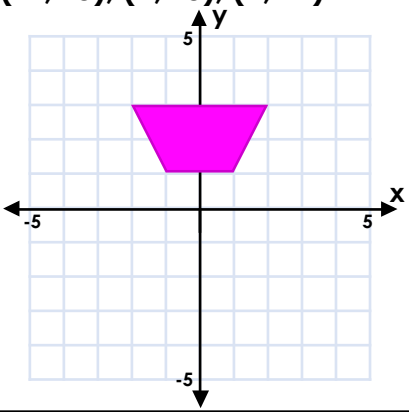


E

VF

Reflections

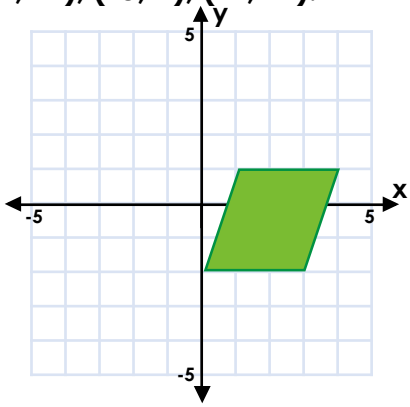
7a. True or false? If this shape is reflected in the x axis, the new coordinates will be (-2, -1), (-1, -3), (1, -3), (2, -1)



GD VF

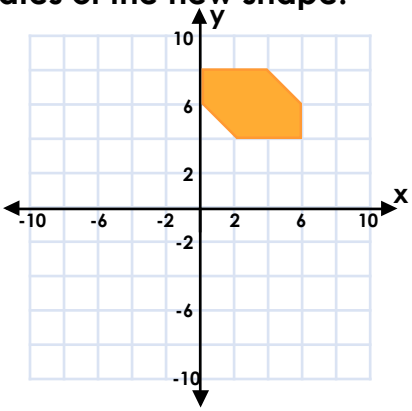
Reflections

7b. True or false? If this shape is reflected in the y axis, the new coordinates will be (0, 1), (-1, -2), (-3, 1), (-4, -2).



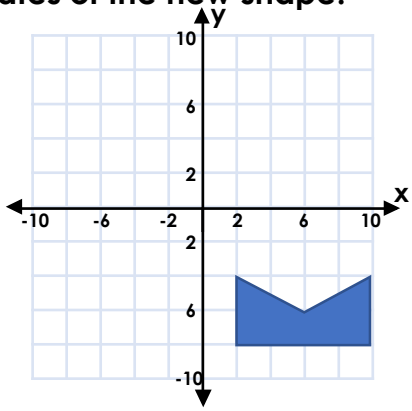
GD VF

8a. Reflect the shape in the x axis and then the y axis. Complete the coordinates of the new shape.



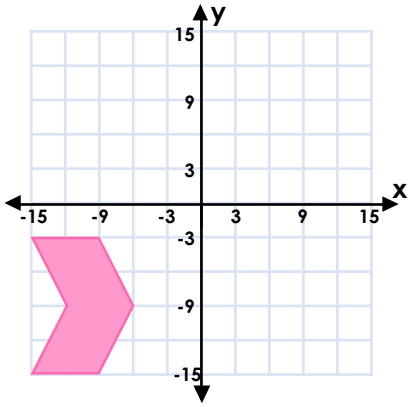
GD VF

8b. Reflect the shape in the y axis and then the x axis. Complete the coordinates of the new shape.



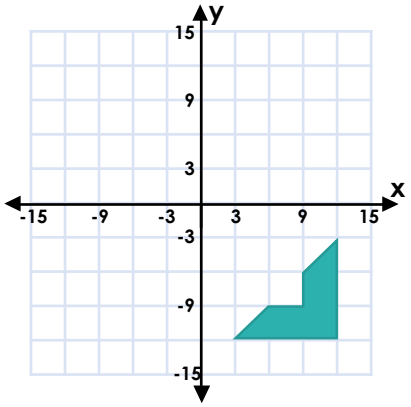
GD VF

9a. Reflect the shape into all four quadrants and draw the new shapes.



GD VF

9b. Reflect the shape into all four quadrants and draw the new shapes.



GD VF

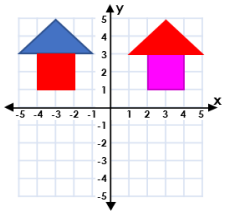
Varied Fluency
Reflections

Developing

1a. True

2a. (3, -4), (5, -1)

3a.

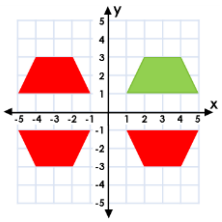


Expected

4a. False. The correct coordinates are (-1, 2), (-1, 4), (-3, 4), (-4, 2), (-4, 3).

5a. (2, -5), (3, -2), (4, -5)

6a.

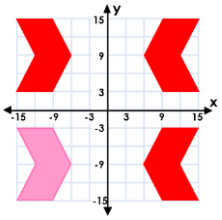


Greater Depth

7a. False. The correct coordinates are (-2, -3), (-1, -1), (1, -1), (2, -3).

8a. (0, -6), (0, -8), (-2, -4), (-4, -8), (-6, -4), (-6, -6)

9a.



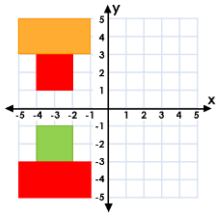
Varied Fluency
Reflections

Developing

1b. False. The correct coordinates are (1, -1), (1, -4), (4, -1), (4, -4).

2b. (5, -1), (5, -5)

3b.

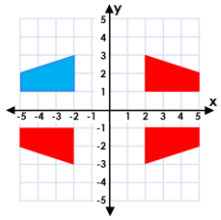


Expected

4b. True

5b. (2, -2), (2, -4), (5, -2), (5, -4)

6b.



Greater Depth

7b. False. The correct coordinates are (0, -2), (-1, 1), (-3, -2), (-4, 1).

8b. (-2, 4), (-2, 8), (-6, 6), (-10, 4), (-10, 8)

9b.