



Graphing in four quadrants

GRADE 6 MATH

Name _____

Date _____

Work through the sheet in order. Sketch a grid to support your answers; final answers go in the boxes.
One skill: **graphing in all four quadrants.**

WORKED EXAMPLE

(x, y) = across, then up/down. Signs give the quadrant: I (+,+), II (-,+), III (-,-), IV (+,-).
Reflecting across the **x-axis** flips the **y**; reflecting across the **y-axis** flips the **x**.

1. In which quadrant is (4, 7)?

FLUENCY

Show your thinking

Answer

2. In which quadrant is (-6, 1)?

FLUENCY

Show your thinking

Answer

3. In which quadrant is (-2, -8)?

FLUENCY

Show your thinking

Answer

4. In which quadrant is $(3, -5)$?

APPLICATION

Show your thinking

Answer

5. Reflect $(-4, 6)$ across the y -axis. Give the new coordinates and say which number changed.

APPLICATION

Show your thinking

Answer

6. Reflect $(2, 5)$ across the x -axis. Give the new coordinates and say which number changed.

APPLICATION

Show your thinking

Answer

7. Where does the point $(0, -4)$ sit? Explain why it is not in any quadrant.

REASONING

Show your thinking

Answer

8. A park map uses the fountain as $(0, 0)$. The gate is at $(3, -7)$ and the pond is at $(-3, 7)$. Are these the same spot? Describe where each one is.

REASONING

Show your thinking

Answer

9. Reflect $(3, -7)$ across the x-axis AND then across the y-axis. Give the final coordinates and explain each step.

REASONING

Show your thinking

Answer