



GRADE 6 · GEOMETRY · HOMEWORK

DRAWING POLYGONS IN THE COORDINATE PLANE

Today's goal: I can draw polygons in the coordinate plane given coordinates for the vertices and use coordinates to graph points in all four quadrants of the coordinate plane.



Pick your peppers!

Everyone does Mild & Medium. Then climb as high as you can.



Mild

Tan the Turtle



Medium

Digit the Fox



Spicy

Blaze the Dragon

WATCH MR DJ SOLVE

Plot $(-7, -2)$ and name its quadrant.

1 Left 7, down 2 → Quadrant III.

Answer: **Quadrant III**



REMEMBER (x, y) — across first, then up or down. Quadrants counter-clockwise from top right: I $(+, +)$, II $(-, +)$, III $(-, -)$, IV $(+, -)$. A zero coordinate puts the point on an axis, in no quadrant.



FAMILY CORNER

No need to remember this math yourself! Ask your student to teach you Mr DJ's example, then try the first Mild problem together.



MILD

Tan the Turtle: Slow and steady. Warm up!

1 Plot $(6, 2)$ and name its quadrant.

Answer _____

2 Plot $(-3, 8)$ and name its quadrant.

Answer _____



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Plotted (2, 6).



MEDIUM

Digit the Fox: Stretch your brain.

- 3** Plot (5, -6) and name its quadrant.

Answer

- 4** Draw the rectangle with vertices (-4, 1), (2, 1), (2, 5) and (-4, 5). How long is the bottom side?

Answer

- 5** Draw the triangle with vertices (1, 1), (1, 6) and (5, 1). What kind of triangle is it, and how can you tell from the coordinates?

Answer



SPICY

Blaze the Dragon: Bring the heat!

- 6 Three vertices of a rectangle are $(-2, -2)$, $(3, -2)$ and $(-2, 7)$. Find the fourth vertex and explain how you knew.

Answer

- 7 Plot $(-6, 0)$. Which quadrant is it in? Explain your answer carefully.

Answer



How did this sheet feel? ☐ Easy for me ☐ Just right ☐ Made me think

Stuck? Watch Mr DJ explain it

"Coordinate Plane Explained: Plotting Points and Quadrants"
on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

Three new math puzzles every day, free:
puzzles.mathwithmrdj.com