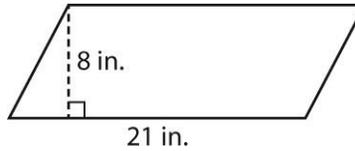


American Math 6th Grade HW 25;

Distance and Area in the Coordinate Plane

1. What is the area of the figure below? Show your work.



- A 84 in² C 168 in²
 B 160 in² D 336 in²

2. On a coordinate plane, what is the distance between the point at (4, 7) and the point at (-4, 7)? Show your work.

- A 8 units C 12 units
 B 11 units D 14 units

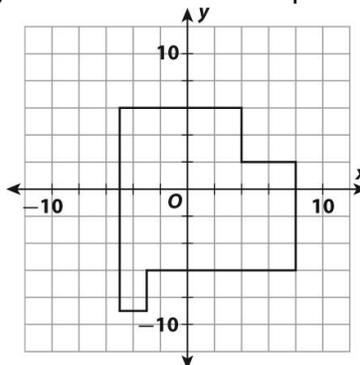
3. On a coordinate plane, what is the distance between the point at (7, 6) and the point at (7, -9)? Show your work.

- A 2 units C 14 units
 B 13 units D 15 units

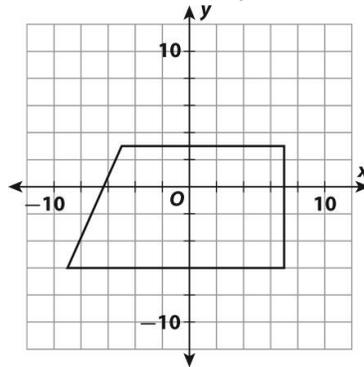
4. A polygon plotted on the coordinate plane has 6 vertices. What is the shape of the polygon?

- A quadrilateral C octagon
 B hexagon D pentagon

5. What is the perimeter of the figure on the coordinate plane below? Show your work.



6. What is the area of the figure on the coordinate plane below? Show your work.



7. Alan found the distance between point $A(-8, -4)$ and point $B(3, -4)$. His work is shown below.

$$\begin{aligned}
 & -8 \text{ to the } y\text{-axis} = 8 \text{ units} \\
 & 3 \text{ to the } y\text{-axis} = 3 \text{ units} \\
 & |-8| - |3| = 5 \text{ units from } A \text{ to } B
 \end{aligned}$$

What error did Alan make? What is the actual distance from point A to point B ?

8. A map is drawn on the coordinate plane. Each unit represents 12.5 miles. Thom has to drive from his office at point G to deliver some important papers to his boss at point H , following the indicated route. Thom drives steadily at 52 miles per hour. How long will it take him to get from point G to point H ? Show your work.

