

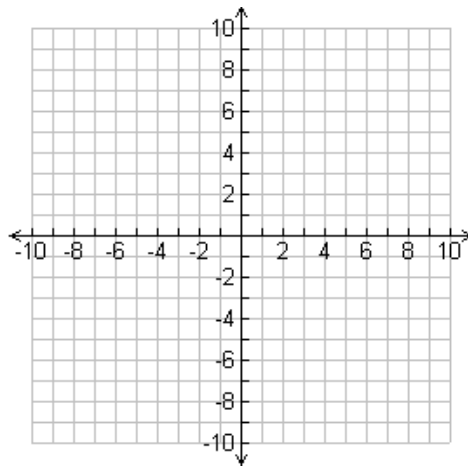
# Coordinate Geometry

SWBAT apply geometric shapes to the coordinate plane.

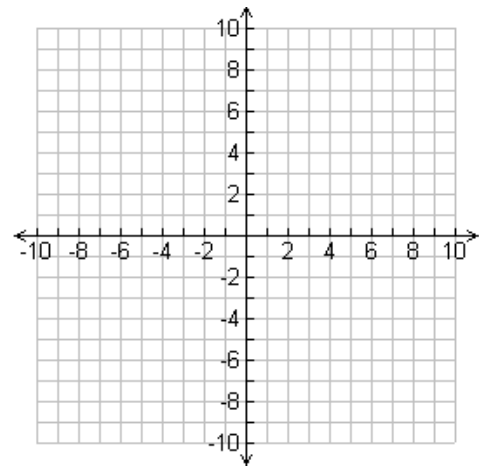
## Geometric Shapes

1. A quadrilateral has vertices located at  $(-3, -5)$ ,  $(4, 2)$ ,  $(4, 1)$ , and  $(2, -1)$ . Which of the following best describes the figure?

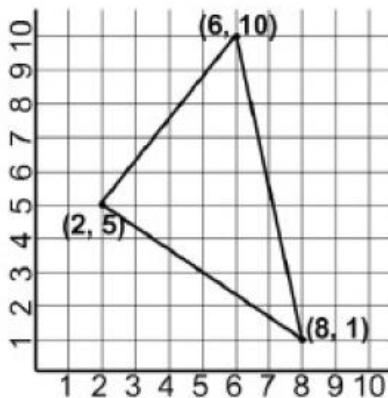
- a) Rhombus
- b) Rectangle
- c) Trapezoid
- d) Square



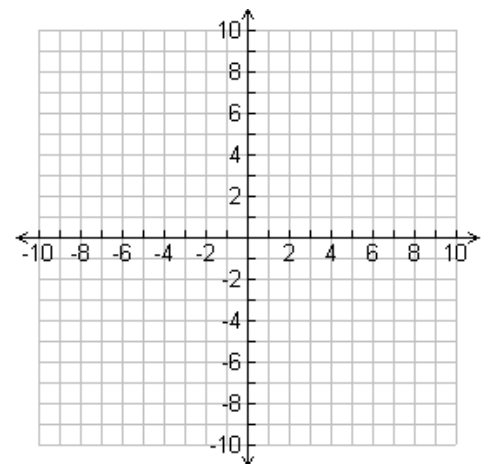
2. A quadrilateral has vertices at  $(-8, 0)$ ,  $(-4, -4)$ ,  $(0, 8)$  and  $(4, 4)$ . What is the area of the quadrilateral?



3. Which term best describes the triangle shown?
- a. Equilateral
  - b. Right
  - c. Scalene
  - d. Isosceles



4. A triangle has vertices of  $(1, 2)$ ,  $(3, 1)$ , and  $(-2, -1)$ . What is the perimeter of the triangle, rounded to the nearest unit?



# Geometry Application

*SWBAT apply geometric formulas to solve real-life application problems.*

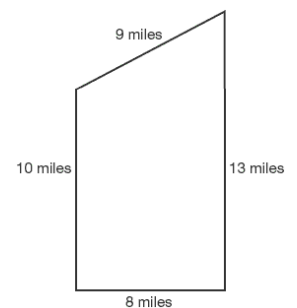
<b>Area Formulas:</b>		<b>Volume Formulas:</b>	
<b>Circle</b>		<b>Rectangular Prism (box)</b>	
<b>Square</b>		<b>Cylinder (can)</b>	
<b>Rectangle</b>		<b>Cone</b>	
<b>Triangle</b>		<b>Sphere (ball)</b>	
<b>Trapezoid</b>			

1. The volume of a sphere is 1,600 cubic centimeters. What is the approximate length of the diameter?

(Volume of a sphere =  $\frac{4}{3}\pi r^3$ .)

2. Stuckeyburg is a small town in rural America. Use the map to approximate the area of the town.

- a. 40 miles<sup>2</sup>
- b. 104 miles<sup>2</sup>
- c. 93.5 miles<sup>2</sup>
- d. 92 miles<sup>2</sup>



3. The volume of a cone can be found using the formula  $V = \frac{1}{3}Bh$ , where B is the area of the base of the cone and h is the height. A cone has a volume of 262 cubic inches and a height of 10 inches. What is the approximate length of the radius of the cone rounded to the nearest inch?

