

Polygons in the Coordinate Plane

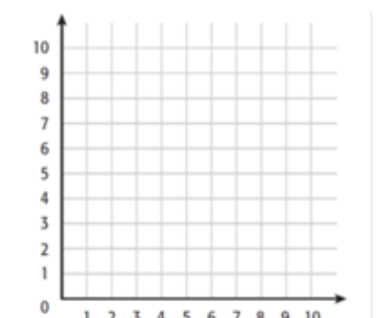
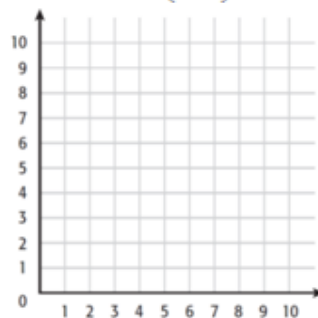
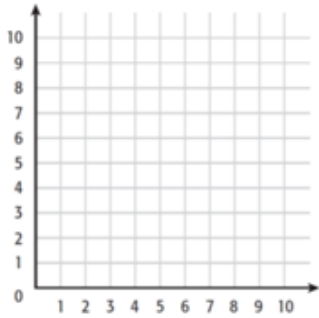
You must earn 6 points!

Draw the polygon with the given vertex in a coordinate plane.

1

point

1. $A(2, 5), B(0, 0), C(3, 2)$ 2. $D(3, 1), E\left(2, \frac{1}{2}\right), F(6, 2)$ 3. $G(4, 1), H(9, 1), J(9, 3), K(4, 3)$



Find the perimeter and the area of the polygon with the given vertices.

4. $E(0, 0), F(7, 0), G(7, 2), H(0, 2)$ 5. $P(4, 5), Q(4, 9), R(8, 9), S(8, 5)$ 6. $C(4, 1), D(4, 6), E(9, 6), F(9, 1)$

Perimeter=

Perimeter=

Perimeter=

Area=

Area=

Area=

Solve the word problem.

7. You design a courtyard using a coordinate plane. You plot the vertices of the courtyard at $F(1, 0)$, $G(5, 8)$, and $H(1, 8)$. The coordinates are measured in yards.
- What is the shape of the courtyard?
 - What is the area of the courtyard?

2

points

8. You use a coordinate plane to plot the two bus routes that you can take from your house to your school. You plot your house at $A(5, 5)$ and the school at $C(25, 20)$. The first route includes one bus stop at $B(5, 20)$. The second route includes bus stops at $D(24, 15)$, $E(20, 15)$ and $F(20, 5)$. Which route has the shorter distance? Explain.

Draw a polygon with the give conditions in a coordinate plane.

9. A square with an area of 25 square units.

10. A triangle with an area of 6 square units.

Reflecting Back

You must complete ALL 6 problems!

1. Write an equivalent expression.

$$8y + 12 + 2y - 6 + 8$$

2. Solve the equation. Check your solution.

$$3 \bullet n = 63$$

3. Solve the inequality. Graph the solution.

$$\frac{n}{3} \geq 12$$

4. Find the percent.

What is 88% of 50?

5. Use a ratio table to answer the word problem.

You are making a salad. The ratio of olives to croutons is 5 : 3. You put 12 croutons in your salad. How many olives do you put in your salad?

6. Find the Greatest Common Factor (GCF) & the Least Common Multiple (LCM).

28 and 72

