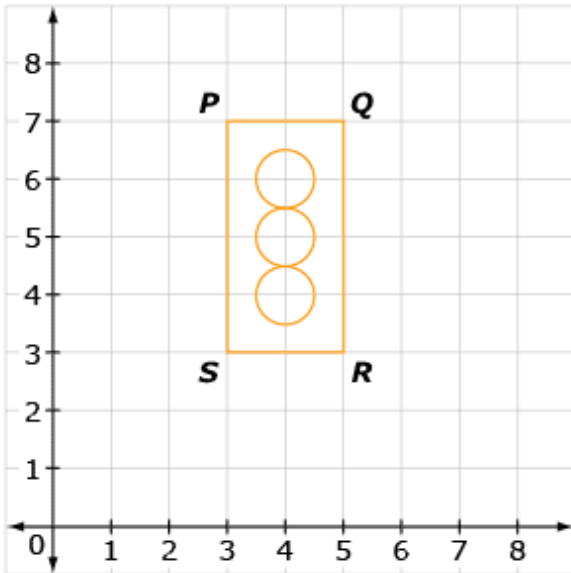




## Level 1: Geometry Pretest

### Question 1:

Shalla is an electrician. She drew a switch on this coordinate plane.



Which points have an  $x$ -coordinate value of 3?

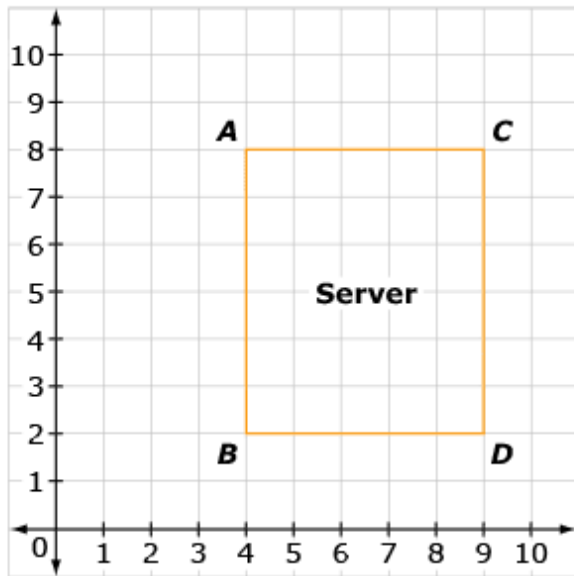
- a. Points  $P$  and  $Q$
- b. Points  $P$  and  $R$
- c. Points  $P$  and  $S$
- d. Points  $S$  and  $R$

Continue ➡



**Question 2:**

Keith is a network engineer. He drew a server on the coordinate grid.



Which statement is true?

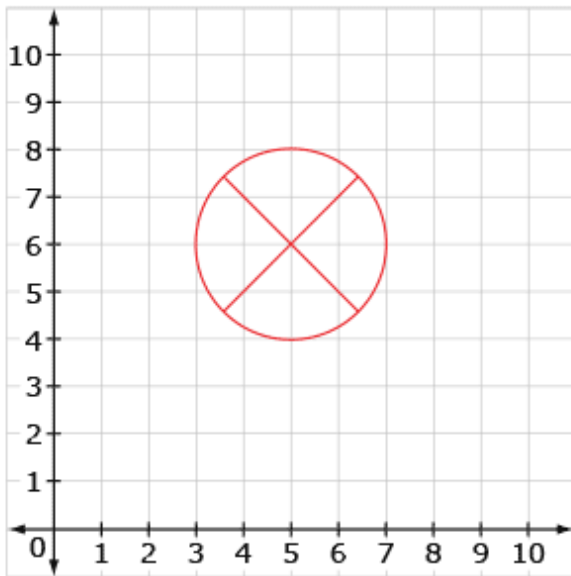
- a. Points *A* and *B* have the same *y*-coordinate value.
- b. Points *C* and *D* have the same *y*-coordinate value.
- c. Points *A* and *B* have the same *x*-coordinate value.
- d. Points *B* and *D* have the same *x*-coordinate value.

Continue ➡



**Question 3:**

An electrician is drawing a diagram to wire a room. The symbol represents a light switch.



Which coordinate pair represents the location of the center of the switch?

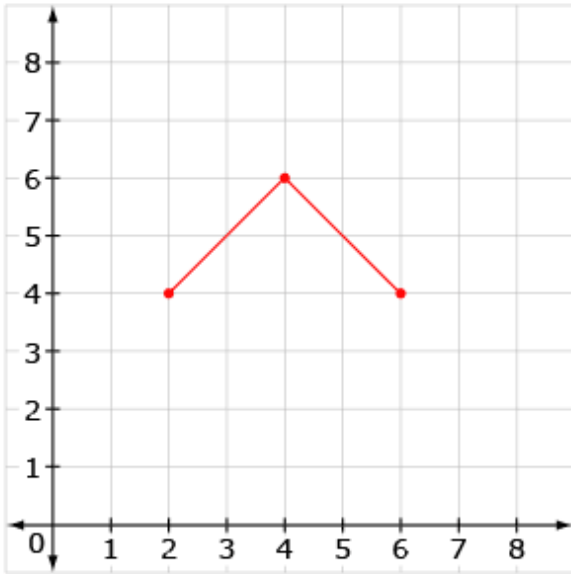
- a. (5, 5)
- b. (5, 6)
- c. (6, 5)
- d. (6, 6)

Continue ➡



**Question 4:**

A graphic designer is creating a logo for a company. He starts to draw the logo in the shape of a rhombus on this coordinate grid.



What are the coordinates of the fourth vertex?

(  ,  )

**Question 5:**

An architect wants a window shaped like an obtuse triangle.

Which triangle should he use to show the shape of the window?

- a.
- b.
- c.
- d.

Continue ➡



**Question 6:**

An artist is asked to draw a quadrilateral that is a parallelogram.

Which shape should he draw?

- a. kite
- b. circle
- c. square
- d. trapezoid

**Question 7:**

An artist drew a polygon. She divided the polygon into two isosceles trapezoids.

What is the name of the polygon?

- a. circle
- b. octagon
- c. hexagon
- d. pentagon

**Question 8:**

The diagram shows the shape of a picture window.



Which statement is true about the window?

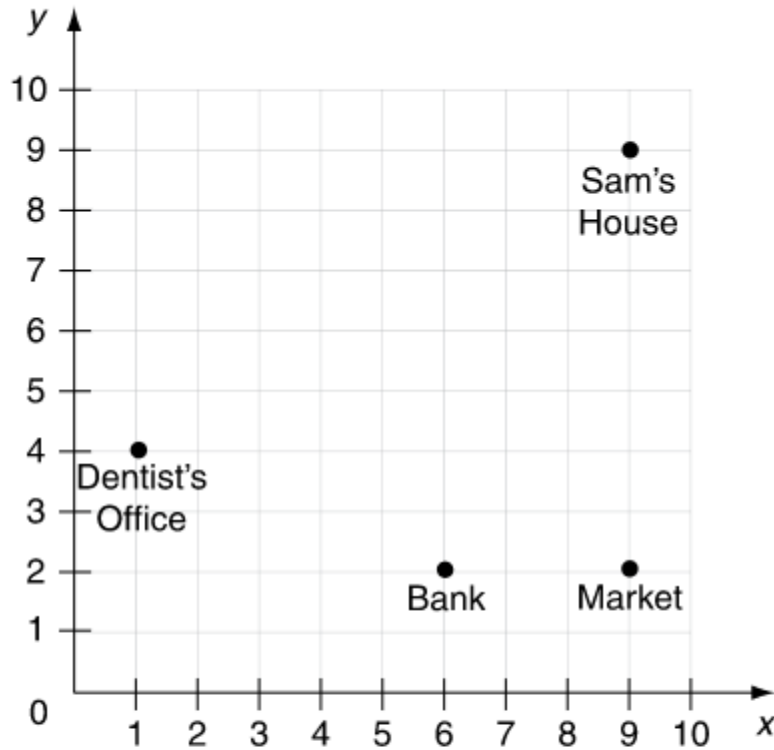
- a. It is a parallelogram with only one pair of opposite sides parallel.
- b. It is a parallelogram with four equal sides and four equal angles.
- c. It is a quadrilateral with two pairs of congruent sides.
- d. It is a quadrilateral with four congruent sides.

Continue ➡



**Question 9:**

The locations of some places in a town are shown on the grid below.



Which coordinates represent the location of the market?

- a. (2, 9)
- b. (6, 2)
- c. (9, 2)
- d. (9, 9)

Continue ➡



**Question 10:**

Look at the figures below.



Figure 1



Figure 2



Figure 3

Which figures are rhombuses?

- a. Figure 2 only
- b. Figure 3 only
- c. Figures 1 and 2
- d. Figures 1 and 3

**Question 11:**

Look at the figures below.



Figure 1



Figure 2



Figure 3



Figure 4

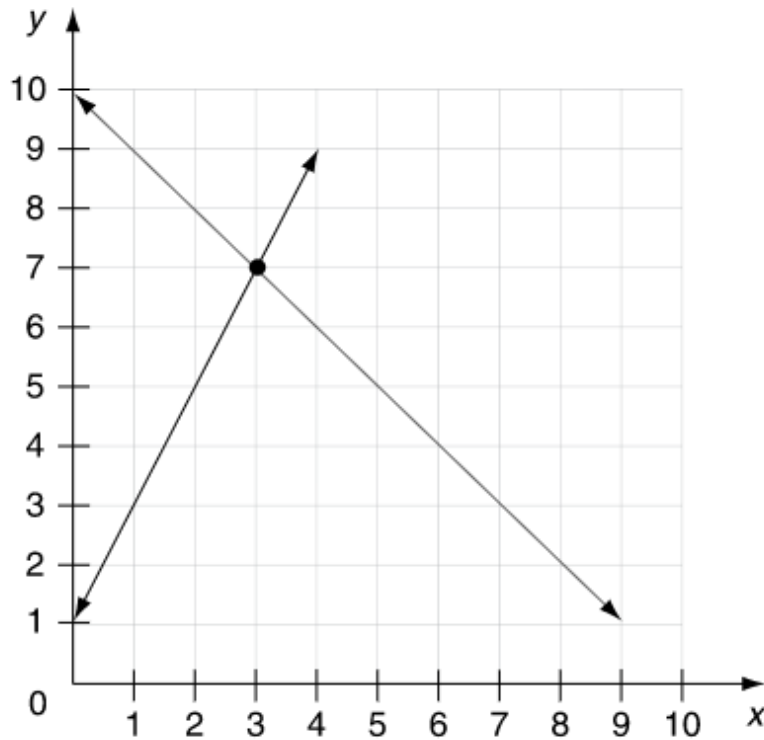
Which figures are parallelograms?

- a. Figure 4 only
- b. Figures 2 and 4 only
- c. Figures 2, 3, and 4 only
- d. Figures 1, 2, 3, and 4



**Question 12:**

Look at the two intersecting lines graphed on the coordinate plane below.



What is the x-coordinate of the point where the two lines intersect?

x =

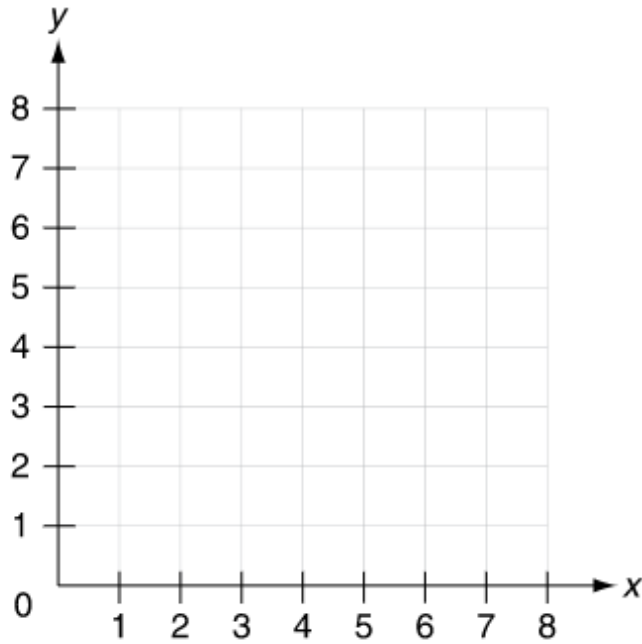
Continue ➡





**Question 13:**

You may use the coordinate plane below to help you answer this question.



Three vertices of a parallelogram are at  $(4, 4)$ ,  $(7, 4)$ , and  $(6, 2)$ .

Write the coordinates of a point that could be the fourth vertex of the parallelogram.

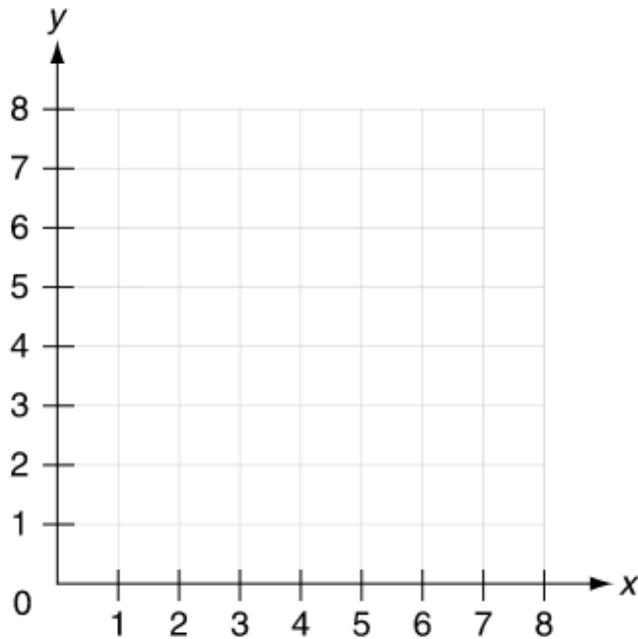
(  ,  )

Continue ➡



**Question 14:**

You may use the coordinate plane below to help you answer this question.



The three vertices of a rectangle are at  $(2, 1)$ ,  $(4, 1)$ , and  $(4, 5)$ .

What are the coordinates of its fourth vertex?

(  ,  )

**Question 15:**

Point  $T$  is located on a coordinate plane 3 units to the right of the origin  $(0, 0)$  and 4 units above the origin.

What are the coordinates for point  $T$ ?

- a.  $(0, 3)$
- b.  $(3, 4)$
- c.  $(4, 0)$
- d.  $(4, 3)$