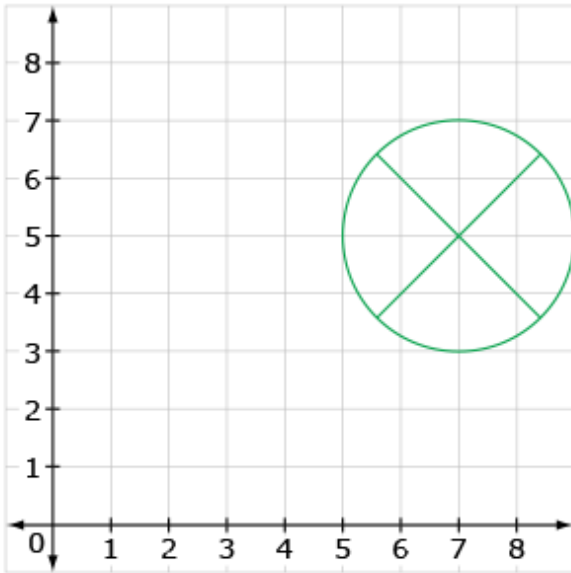




## Level 1: Geometry Posttest

### Question 1:

Kaya drew this shape on a coordinate grid to represent a light switch on an electrical diagram.



The center of the light switch is located 7 units to the right of the origin and 5 units above the origin.

What is the  $y$ -coordinate value of the point?

- a. 0
- b. 5
- c. 7
- d. 12

Continue ➡



**Question 2:**

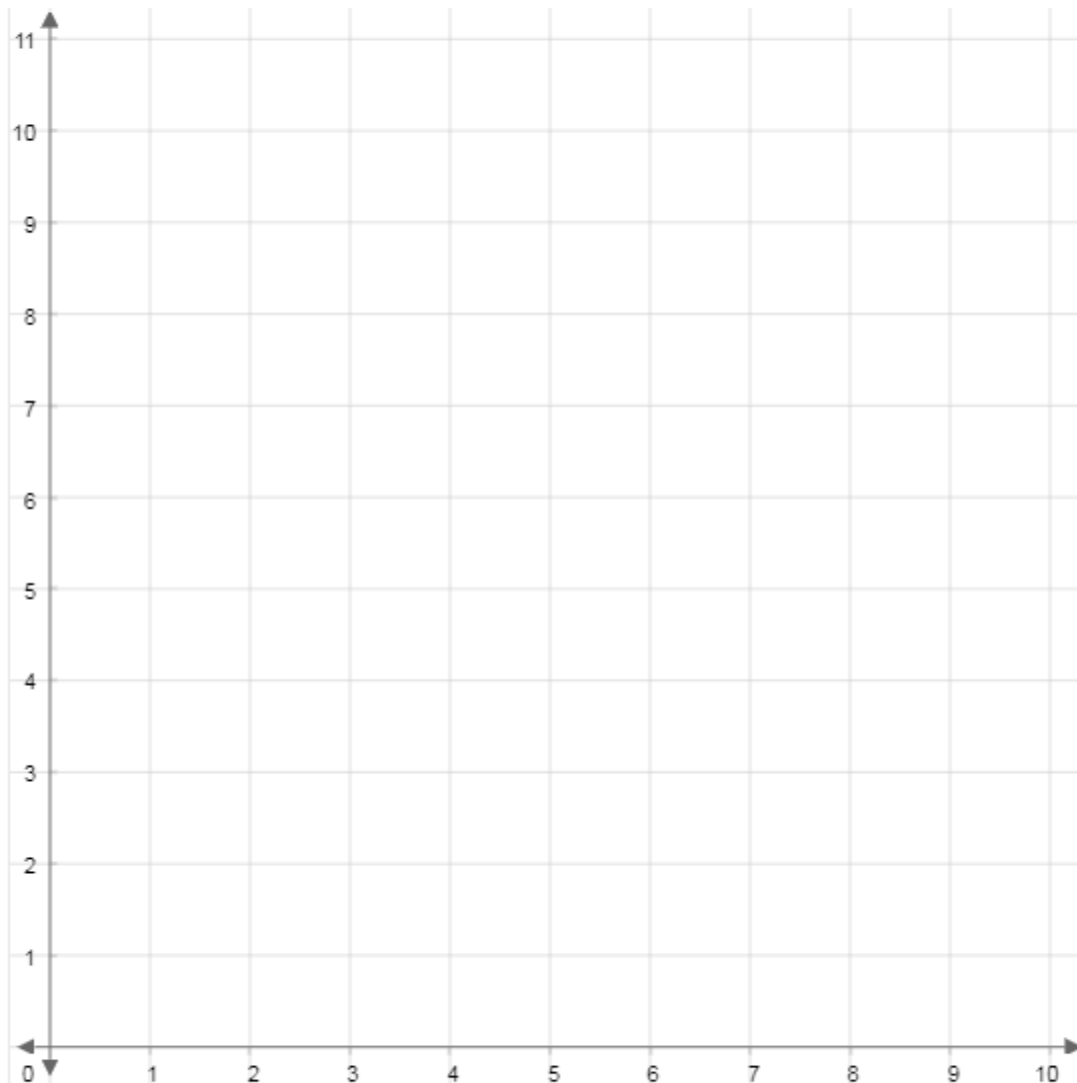
A graphic designer is creating a company logo. The designer plots the following points on a coordinate grid.

Point A: (4, 9)

Point B: (4, 3)

Point C: (7, 3)

- a. Plot the points on the grid.



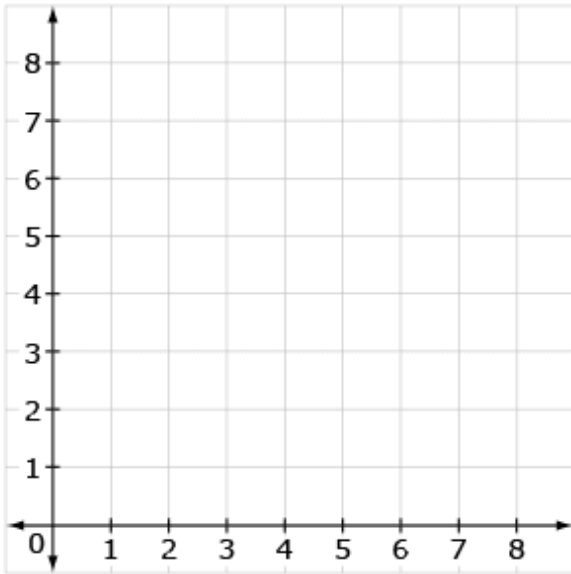
- b. If the designer connects the points in order starting with Point A, what letter is formed?

Continue ➡



**Question 3:**

You may use the grid to help answer the questions that follow.



Kael draws two points  $(7, 5)$  and  $(7, 1)$  to form a line. Kael draws a second line that is parallel to the first line. One point on the second line is 3 units from the first line.

Which of the following could be the coordinates of two points on the second line? (Select all that apply.)

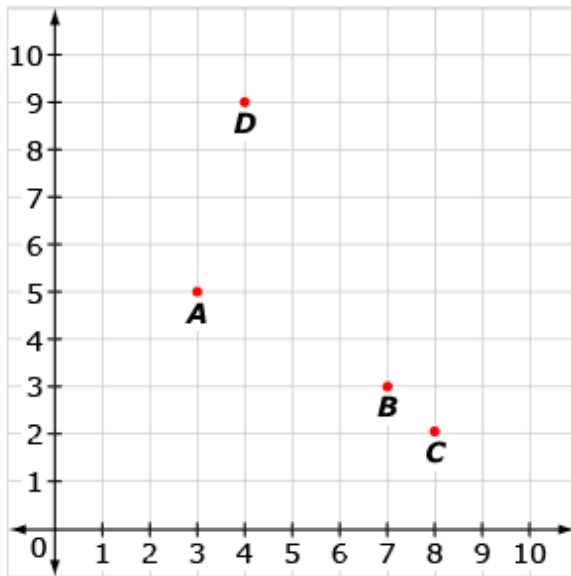
- a.  $(4, 3), (4, 7)$
- b.  $(5, 7), (1, 7)$
- c.  $(1, 10), (4, 10)$
- d.  $(7, 3), (7, 6)$
- e.  $(10, 2), (10, 8)$

Continue ➡



**Question 4:**

An animator plots the points shown on the coordinate grid.



Which points have a  $y$ -coordinate value that is greater than its  $x$ -coordinate value? (Select all that apply.)

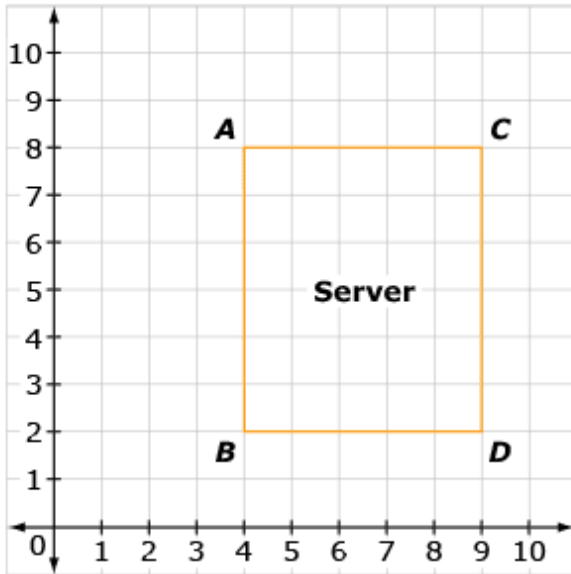
- a. Point A
- b. Point B
- c. Point C
- d. Point D

Continue ➡



**Question 5:**

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



Which statement is true?

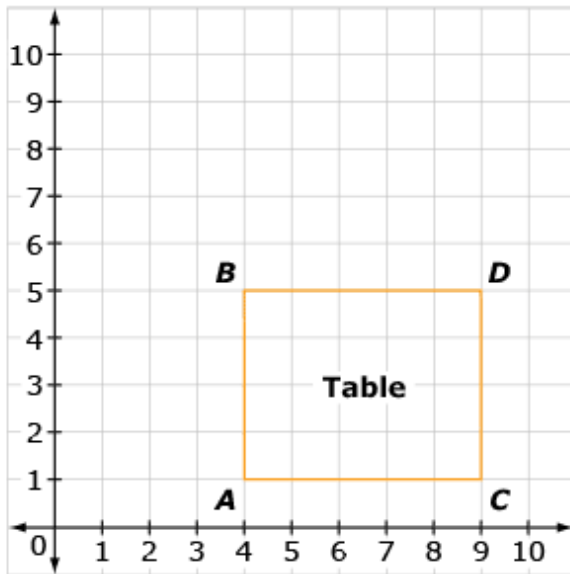
- a. Points *A* and *B* have the same *y*-coordinate value.
- b. Points *C* and *D* have the same *y*-coordinate value.
- c. Points *A* and *B* have the same *x*-coordinate value.
- d. Points *B* and *D* have the same *x*-coordinate value.

Continue ➡



**Question 6:**

A food photographer is designing a layout for a client. The table is shown on the coordinate grid.



The client wants the table two units to the right.

What are the new coordinates of Point *D*?

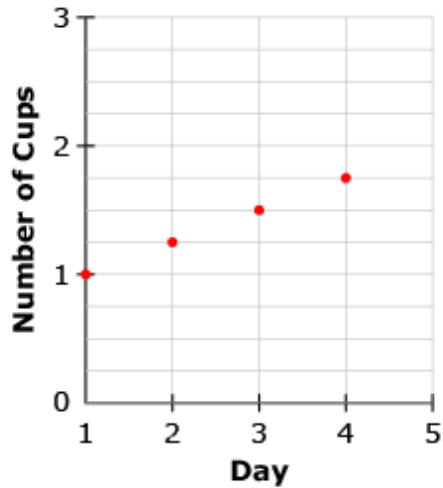
- a. (11, 5)
- b. (5, 11)
- c. (7, 5)
- d. (7, 9)

Continue ➡



**Question 7:**

A veterinarian creates this graph to show how many cups of milk to feed a newborn piglet each day.



If the pattern continues, how many cups of milk should the piglet have on Day 5?

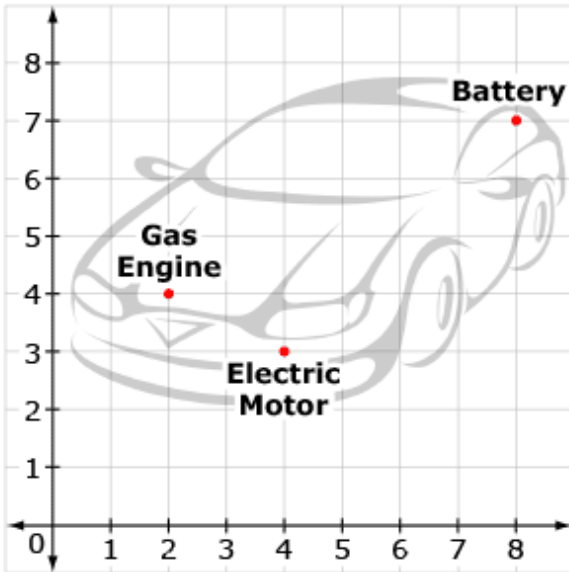
cups

Continue ➡



**Question 8:**

Kendall works on hybrid cars. This grid shows the location of four different parts of a typical hybrid car.



The gas tank is located between the battery and the electric motor.

Which coordinates could represent the location of the gas tank?

- a. (6, 5)
- b. (6, 3)
- c. (5, 6)
- d. (3, 2)




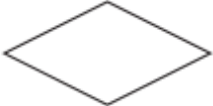


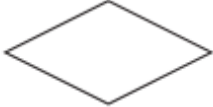





**Question 9:**

Electricians use these symbols to create electrical diagrams.

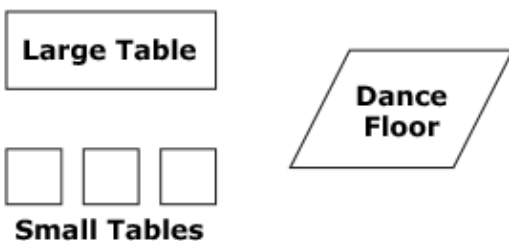


Which pair of shapes shows two parallelograms?

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

**Question 10:**

Abena is an event planner. She is looking at this room plan.



Which statement is true about the shapes used in the room plan?

- a. All of the shapes in the room plan are rectangles.
- b. The shape of the large table is both a square and a rectangle.
- c. The shape of the dance floor is both a square and a rhombus.
- d. The shape of one small table is both a rectangle and a rhombus.

Continue ➡



**Question 11:**

An event planner is drawing a seating plan. To fit in the space, the table next to the dance floor must be a quadrilateral that is both a parallelogram and a rectangle.

What shape must he use for the table?

The table must be shaped like a .

**Question 12:**

A sheet of metal is cut in the shape of a quadrilateral with two pairs of congruent, parallel sides and four right angles.

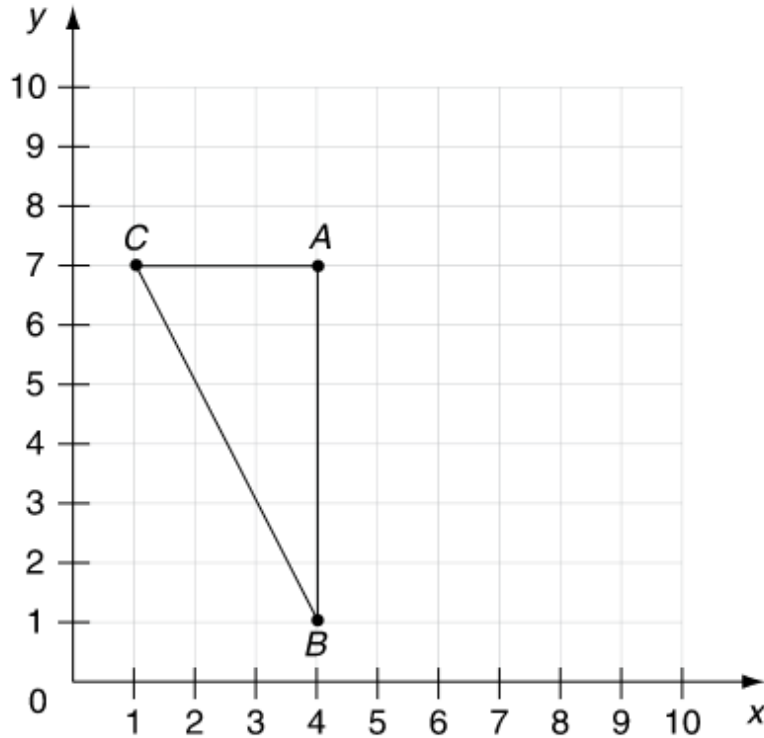
Which of the following could be the shape?

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



**Question 13:**

Look at triangle  $ABC$  shown on the coordinate plane below.



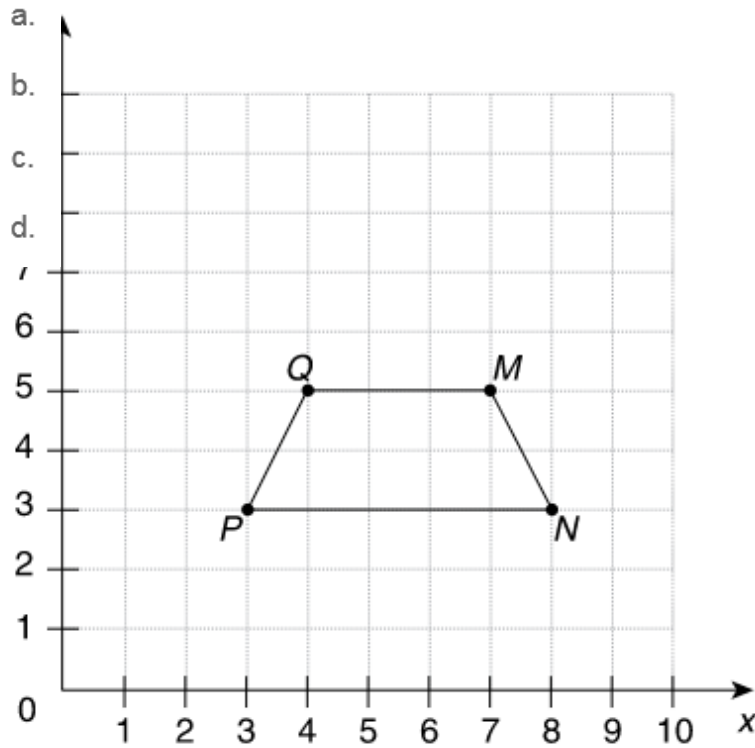
What are the coordinates of vertex  $A$  of the triangle?

- a.  $(1, 7)$
- b.  $(4, 1)$
- c.  $(4, 7)$
- d.  $(7, 4)$



**Question 14:**

Look at the trapezoid graphed on the coordinate plane below.



What are the coordinates of vertex  $M$  of the trapezoid?

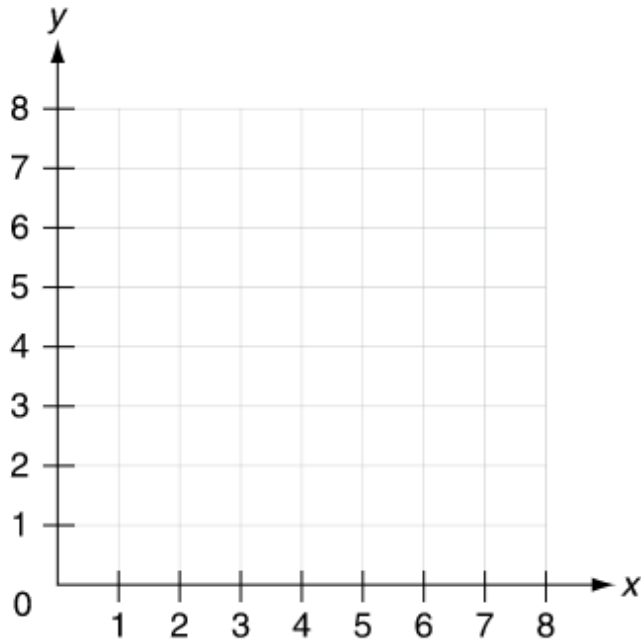
(  ,  )

Continue ➡



**Question 15:**

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



The coordinates of three vertices of a rectangle are located at  $(4, 7)$ ,  $(6, 7)$ , and  $(6, 3)$ .

What are the coordinates of the fourth vertex?

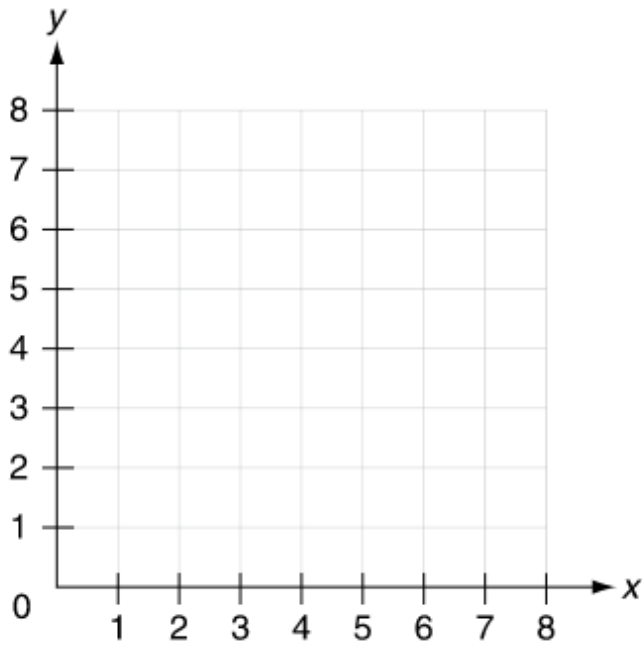
(  ,  )

Continue ➡



**Question 16:**

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



Three vertices of a square are located at  $(2, 1)$ ,  $(6, 1)$ , and  $(2, 5)$ .

What are the coordinates of the fourth vertex?

(  ,  )