

**Homework: Ordered Pairs on the Coordinate Plane**

1. Use the set of ordered pairs below to answer each question.

**{(4, 20), (8, 4), (2, 3), (15, 3), (6, 15), (6, 30), (1, 5), (6, 18), (0, 3)}**

a. Write the ordered pair(s) whose first and second coordinate have a greatest common factor of 3.

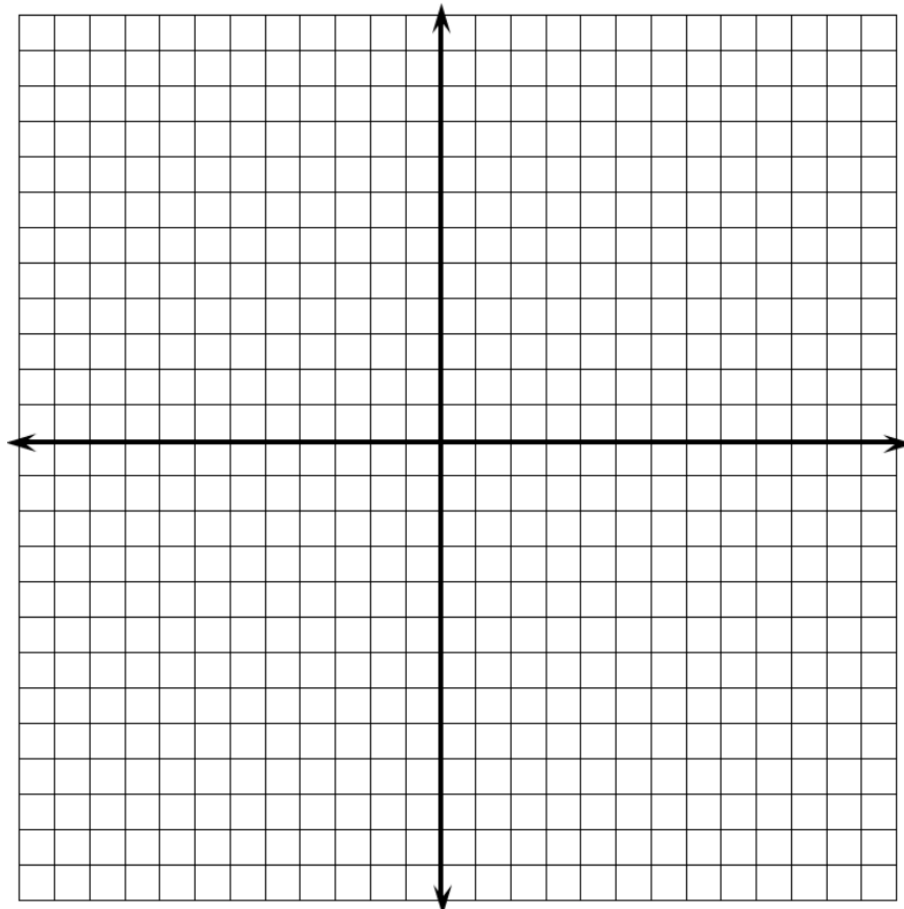
b. Write the ordered pair(s) whose first coordinate is a factor of its second coordinate.

c. Write the ordered pair(s) whose second coordinate is a prime number.

2. Locate and label each set of points on the coordinate plane.

a.  $\{(-9, 9), (-4, 4), (1, -1), (3, -3), (0, 0)\}$

b.  $\{(-7, -8), (0, -8), (10, -8), (-3, -8)\}$



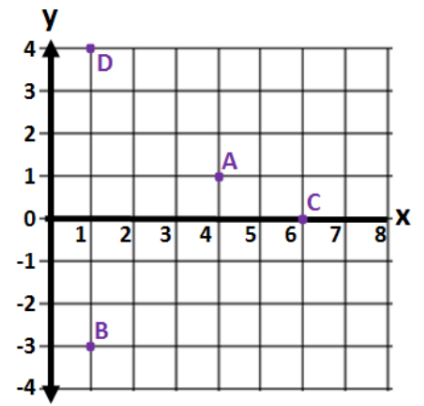
3. Write ordered pairs that represent the location of points  $A$ ,  $B$ ,  $C$ , and  $D$ .

**A** (     ,     )

**C** (     ,     )

**B** (     ,     )

**D** (     ,     )



4. Find the lengths of the line segments whose end points are given below. Explain how you determined that the line segments are horizontal or vertical.

a.  $(-3, 4)$  and  $(-3, 9)$

b.  $(2, -2)$  and  $(-8, -2)$

c.  $(-6, -6)$  and  $(-6, 1)$

d.  $(-9, 4)$  and  $(-4, 4)$