

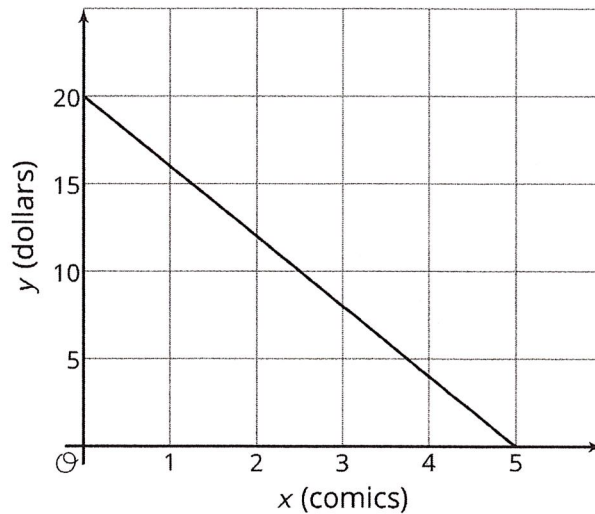
Lesson 12 Practice Problems

1. Select **all** of the ordered pairs (x, y) that are solutions to the linear equation $2x + 3y = 6$.

- A. $(0, 2)$
- B. $(0, 6)$
- C. $(2, 3)$
- D. $(3, -2)$
- E. $(3, 0)$
- F. $(6, -2)$

2. The graph shows a linear relationship between x and y .

x represents the number of comic books Priya buys at the store, all at the same price, and y represents the amount of money (in dollars) Priya has after buying the comic books.



- a. Find and interpret the x - and y -intercepts of this line.
- b. Find and interpret the slope of this line.
- c. Find an equation for this line.
- d. If Priya buys 3 comics, how much money will she have remaining?

3. Match each equation with its three solutions.

A. $y = 1.5x$

1. $(14, 21), (2, 3), (8, 12)$

B. $2x + 3y = 7$

2. $(-3, -7), (0, -4), (-1, -5)$

C. $x - y = 4$

3. $(\frac{1}{2}, \frac{1}{2}), (\frac{1}{4}, \frac{3}{4}), (\frac{1}{8}, \frac{7}{8})$

D. $3x = \frac{y}{2}$

4. $(1, 1\frac{2}{3}), (-1, 3), (0, 2\frac{1}{3})$

E. $y = -x + 1$

5. $(0.5, 3), (1, 6), (1.2, 7.2)$

4. A container of fuel dispenses fuel at the rate of 5 gallons per second. If y represents the amount of fuel remaining in the container, and x represents the number of seconds that have passed since the fuel started dispensing, then x and y satisfy a linear relationship.

In the xy -plane, will the slope of the line representing that relationship have a positive, negative, or zero slope? Explain how you know.

5. A sandwich store charges a delivery fee to bring lunch to an office building. One office pays \$33 for 4 turkey sandwiches. Another office pays \$61 for 8 turkey sandwiches. How much does each turkey sandwich add to the cost of the delivery? Explain how you know.