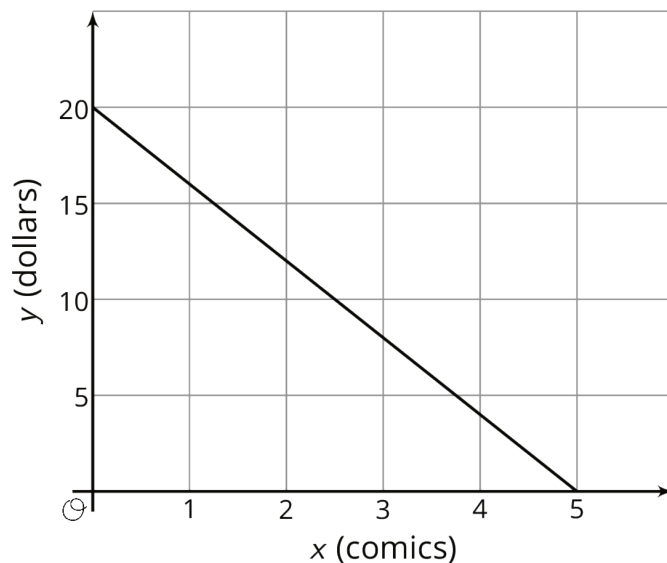# Lesson 12 Practice Problems

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. $(3, \text{-}2)$

    E. $(3, 0)$

    F. $(6, \text{-}2)$

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?

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3. Match each equation with its three solutions.

A. $y = 1.5x$

B. $2x + 3y = 7$

C. $x - y = 4$

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

E. $y = \text{-}x + 1$

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

2. $(\text{-}3, \text{-}7), (0, \text{-}4), (\text{-}1, \text{-}5)$

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

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

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

(From Unit 3, Lesson 10.)

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.

(From Unit 3, Lesson 5.)