1. Find the slope and the y-intercept of the line.

   $y = -3x + 7$

   Select the correct choice below and fill in any answer boxes within your choice.

   ○ **A.** The slope is _____ .
   (Simplify your answer. Type an integer or a fraction.)
   ○ **B.** The slope is undefined.

   Select the correct choice below and fill in any answer boxes within your choice.

   ○ **A.** The y-intercept is _____ .
   (Simplify your answer. Type an ordered pair. Use integers or fractions for any numbers in the expression.)
   ○ **B.** There is no y-intercept.

2. State the slope and the y-intercept of the line with the given equation.

   $y = 10x$

   Find the slope of the given line. Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

   ○ **A.** The slope is _____ .
   (Type an integer or a simplified fraction.)
   ○ **B.** The slope of the line is undefined.

   Find the y-intercept of the given line. Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

   ○ **A.** The y-intercept is _____ .
   (Type an ordered pair, using integers or fractions.)
   ○ **B.** There is no y-intercept.

3. Use the slope-intercept form of the linear equation to write the equation of the line with the given slope and y-intercept.

   Slope -4; y-intercept (0,8)

   The equation is _____ .
   (Type your answer in slope-intercept form.)

4. Use the slope-intercept form of the linear equation to write the equation of the line with the given slope and y-intercept.

   Slope $\dfrac{1}{5}$; y-intercept (0,0)

   The equation is _____ .
   (Type your answer in slope-intercept form.)

5. Find an equation of the line having the given slope and containing the given point.

Slope 8; through (5,1)

The equation of the line is _____ .
(Simplify your answer. Type your answer in slope-intercept form.)

6. Find an equation of the line having the given slope and containing the given point.

Slope $\frac{3}{4}$; through $(-4,4)$

The equation of the line is _____ .
(Simplify your answer. Type your answer in slope-intercept form.)

7. Find the equation of the line with the given slope and containing the given point.

Slope $-\frac{4}{5}$; through $(-3,0)$

The equation of the line is _____ .
(Simplify your answer. Type your answer in slope-intercept form.)

8. Decide whether the lines are parallel, perpendicular, or neither.

$y = 13x - 7$
$y = 13x + 9$

Are the lines parallel, perpendicular, or neither?

○ Parallel
○ Neither
○ Perpendicular

9. Decide whether the following lines are parallel, perpendicular, or neither.

$y = -10x + 3$
$y = \frac{7}{2}x - 2$

Choose the correct answer below.

○ **A.** The lines are parallel.
○ **B.** The lines are perpendicular.
○ **C.** The lines are neither parallel nor perpendicular.

10. Find an equation of the line passing through the given points. Use function notation to write the equation.

(3,2) and (5,8)

f(x) = _____

11. Find an equation of the line passing through the given points. Use function notation to write the equation,

$(-2,12)$ and $(-1,7)$

f(x) = _____

12. Find an equation of the line passing through the given points. Use function notation to write the equation.
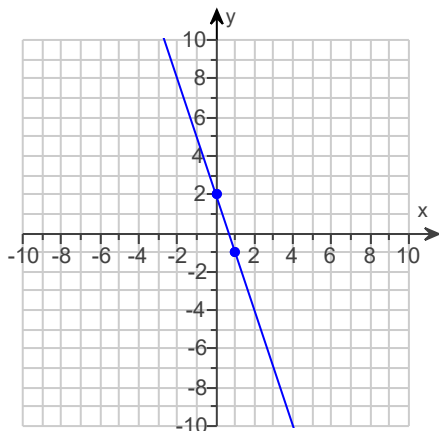
$(-4,-3)$ and $(-6,-2)$

f(x) = _____

13. Find an equation of the line containing the given points. Use function notation to write the equation.

$\left(\dfrac{4}{7}, \dfrac{5}{7}\right)$ and $\left(-\dfrac{1}{7}, \dfrac{11}{14}\right)$

f(x) = _____
(Simplify your answer. Use integers or fractions for any numbers in the expression.)

14. Find an equation of the line graphed. Write the equation in standard form.

The equation is _____.
(Type your answer in standard form. Simplify your answer.)

15. Find the equation of the line. Write the equation of the line in standard form.

With slope $-\dfrac{3}{4}$; y-intercept 3

The equation of the line in standard form is _____.
(Type your answer in standard form. Use integers or fractions for any numbers in the equation.)

16. Find the equation of the line.

Through $(9, -1)$; parallel to the line $4x + 5y = 3$

Which of the following is the equation of the line in standard form?

○ **A.** $4x + 5y = 31$
○ **B.** $4x - 5y = 41$
○ **C.** $5x - 4y = 49$
○ **D.** $4x + 5y = 41$

17. Find an equation of the line. Write the equation using function notation.

Through (4, − 1); perpendicular to $8y = x - 16$

The equation of the line is f(x) = _____ .

1. A. The slope is ____−3____ . (Simplify your answer. Type an integer or a fraction.)

   A. The y-intercept is ____(0,7)____ .
   (Simplify your answer. Type an ordered pair. Use integers or fractions for any numbers in the expression.)

2. A. The slope is ____10____ . (Type an integer or a simplified fraction.)

   A. The y-intercept is ____(0,0)____ .(Type an ordered pair, using integers or fractions.)

3. $y = -4x + 8$

4. $y = \dfrac{1}{5}x$

5. $y = 8x - 39$

6. $y = \dfrac{3}{4}x + 7$

7. $y = -\dfrac{4}{5}x - \dfrac{12}{5}$

8. Parallel

9. C. The lines are neither parallel nor perpendicular.

10. $3x - 7$

11. $-5x + 2$

12. $-\dfrac{1}{2}x - 5$

13. $-\dfrac{1}{10}x + \dfrac{27}{35}$

14. $3x + y = 2$

15. $3x + 4y = 12$

16. A. 4x + 5y = 31

17. − 8x + 31