

Quiz #3 - Lines and Linear Equations

Name: _____ Class: _____

Each multiple-choice question is worth 2 points

1.) What is the slope of a line that passes through points $(-4,2)$ and $(6,8)$?

- (A) $-\frac{3}{5}$ (B) $\frac{3}{5}$ (C) $\frac{5}{3}$ (D) $-\frac{5}{3}$

2.) What is $-x + 4y = -8$ in slope-intercept form?

- (A) $y = -\frac{1}{4}x - 2$ (C) $y = \frac{1}{4}x - 2$
(B) $y = -\frac{1}{4}x - 8$ (D) $y = \frac{1}{4}x - 8$

3.) What is the y-intercept of $y = -\frac{3}{5}x - 7$?

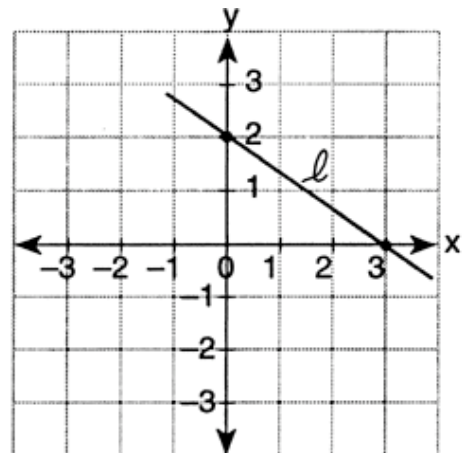
- (A) $\frac{3}{5}$ (B) $-\frac{3}{5}$ (C) 7 (D) -7

4.) What is the slope of the line whose equation is $2y = 5x + 4$?

- (A) 5 (B) $\frac{5}{2}$ (C) 2 (D) $\frac{2}{5}$

5.) What is the slope of line ℓ in the accompanying diagram?

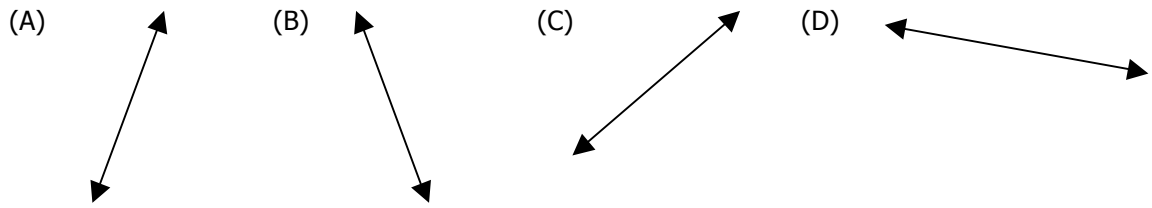
- (A) $-\frac{3}{2}$ (C) $-\frac{2}{3}$
(B) $\frac{2}{3}$ (D) $\frac{3}{2}$



6.) What is the slope of $4x - 2y = -6$?

- (A) -6 (C) -2
(B) 2 (D) 4

7.) Which line has the steepest positive slope?

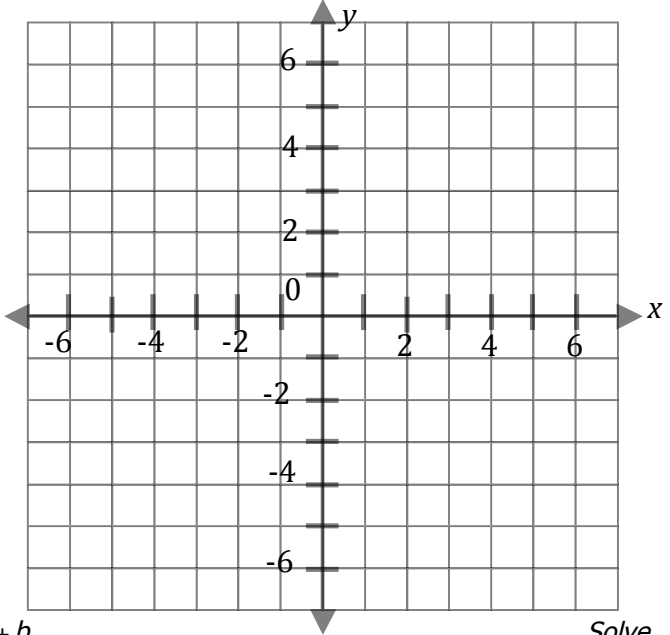


8.) Which pair of points determines a line that is parallel to the y-axis?

- (A) (1,3) and (-2,3)
- (B) (2,3) and (2,5)
- (C) (1,-1) and (-1,1)
- (D) (1,1) and (-3,-3)

9.) Complete the table of values below. Then, graph the line. **(4 points)**

$y - 4x = 2$			
x		y	<i>Coordinate</i>
-2			
-1			
0			
1			



For 10 – 16, write the equation of a line in the form $y = mx + b$.

each question algebraically.

10.) Write the equation of a line with a slope of -1 and a y-intercept of 5. Graph the line on the graph paper provided. **(3 points)**

Solve

- 11.) Write the equation of a line with a slope of -4 that passes through the point (1,2). Graph the line on the graph paper provided. **(4 points)**
- 12.) Write the equation of a line containing the point (4,2) and a slope of $\frac{3}{2}$. Graph the line on the graph paper provided. **(4 points)**
- 13.) Write the equation of a line passing through the points (1,7) and (-2,-8). Graph the line on the graph paper provided. **(4 points)**
- 14.) Find and graph the equation of a horizontal line that passes through the point (3,8). Graph the line on the graph paper provided. **(4 points)**
- 15.) Find and graph the equation of a line that passes through the points (3,3) and (3,7). Graph the line on the graph paper provided. **(4 points)**

16.) Consider the line $3y + 4x = 9$.

a.) Put the line in slope-intercept form and then graph it. **(3 points)**

b.) Find and graph the equation of a line that is parallel to the line and passes through the point $(6, -1)$.

(4 points)

