Quiz 1.5: Forms of Linear Equations

Multiple Choice: Choose the letter that corresponds to the correct answer. Write the answer in your answer sheet.

1. Which formula can be used to find the slope if two points are given?

A.
$$m = \frac{\text{rise}}{\text{run}}$$

$$\mathbf{B.}\ y = mx + b$$

$$B. y = mx + b \qquad \qquad C. Ax + By = C$$

D.
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

2. If the graph of a line is given, which formula can be used to find the slope?

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$$m = \frac{\text{rise}}{\text{run}}$$

$$\mathbf{B.}\ y = mx + b$$

B.
$$y = mx + b$$
 C. $Ax + By = C$

D.
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

3. Graphing linear equations can be done using any of these methods except:

A. Using two points

C. Using two slopes

B. Using the x- and y-intercepts

D. Using the slope and a point

4. What is the slope of a vertical line?

A. Negative number

B. Positive number

C. Undefined

D. Zero

5. The steepness of a line is called:

A. Intercept

B. Origin

C. Slope

D. Trend

6. What is the trend of a line with zero slope?

A. Increasing

B. Decreasing

C. Horizontal

D. Vertical

7. What is the slope of the line with the equation y = 3x + 2?

A. 1

B. 2

C. 3

D. $\frac{3}{5}$

8. How do we find the x-intercept given the equation of a line?

A. Let a=0.

B. Let b = 0.

C. Let x = 0.

D. Let y = 0.

9. Which of the following linear equations is written in the standard form?

A.
$$\frac{2}{3}x + y = 2$$

B.
$$2x + 3y = 4$$
 C. $3x = 2$

C.
$$3x = 2$$

D.
$$-2y = 5$$

10. In the slope-intercept form of linear equation y = mx + b, what does b represent?

A. b-intercept

B. Slope

C. x-intercept

D. v-intercept

11. What is the standard form of the line with the equation $y = \frac{1}{2}x + 3$?

A.
$$x + 2y = 6$$

B.
$$x - 2y = 0$$

B.
$$x - 2y = 6$$
 C. $x + 2y = -6$

D.
$$x - 2y = -6$$

12. Find the slope of the line passing through (-2, -4), (0, 3).

A.
$$\frac{1}{2}$$

B. $\frac{3}{2}$ C. $\frac{5}{2}$

D. $\frac{7}{2}$

13. Determine the trend of the line defined by y = -3x + 7.

A. Increasing

B. Decreasing

C. Horizontal

D. Vertical

14. Rewrite the equation y = 3x - 8 in the form Ax + By = C.

A.
$$3x + y = -8$$

B.
$$3x - y = -8$$

C.
$$3x + y = 8$$

D.
$$3x - y = 8$$

15. Rewrite the equation x + 2y = 4 in the form y = mx + b

A.
$$y = -\frac{1}{2}x + 2$$

B.
$$y = \frac{1}{2}x + 2$$

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 B. $y = \frac{1}{2}x + 2$ C. $y = -\frac{1}{2}x - 2$ D. $y = \frac{1}{2}x - 2$

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B.
$$y = \frac{1}{2}x + 2$$

C.
$$y = -\frac{1}{2}x - \frac{1}{2}$$