

Multiple Choice: Legibly write your answer choice on the blank beside each problem. Each multiple choice question is worth 4 points. Show work where appropriate.

- C 1. _____ is the point-slope form of a linear equation.
a). $ax+by=c$ b). $\frac{y_2-y_1}{x_2-x_1}$ c). $y-y_1=m(x-x_1)$ d). $y=mx+b$

- d 2. The slope-intercept form of a linear equation is _____.
a). $ax+by=c$ b). $\frac{y_2-y_1}{x_2-x_1}$ c). $y-y_1=m(x-x_1)$ d). $y=mx+b$

- d 3. Slope can be defined as _____.
a). rate of change b). $\frac{y_2-y_1}{x_2-x_1}$ c). $\frac{\text{rise}}{\text{run}}$ d). a, b and c

- b 4. One possible solution to the equation $3x+y=6$ is:
a). (3,-1) b). (2,0) c). (0,5) d). (5,1)

- a 5. The slope of a horizontal line is _____.
a). 0 b). 1 c). -1 d). undefined

- C 6. The product of the slopes of perpendicular lines is _____.
a). 0 b). 1 c). -1 d). undefined

- C 7. Where is the graph of (-3,0) located in the coordinate plane?
a). Quadrant I b). Quadrant III c). on the x-axis d). on the y-axis

- d 8. The range of the function $\{(-1,1), (0,0), (1,0), (2,6)\}$ is _____.
a). $\{0,1,2,3,4,5,6\}$ b). $\{-1,0,1,2\}$ c). $\{(-1,1), (1,1)\}$ d). $\{0,1,6\}$

- d 9. Find the slope of the line whose equation is $x+3=0$.
a). 3 b). 0 c). -3 d). undefined

- C 10. Find the equation of the line with slope $\frac{-4}{3}$ that passes through (12,-3).
a). $y=\frac{-4}{3}x-19$ b). $y=\frac{-4}{3}x+19$ c). $y=\frac{-4}{3}x+13$ d). $y=\frac{-4}{3}x-13$

$$y - -3 = \frac{-4}{3}(x - 12)$$
$$y + 3 = \frac{-4}{3}x + 16$$
$$y = \frac{-4}{3}x + 13$$