

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).  $y=\frac{-4}{3}x-13$

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