1. What number can we not divide by? _______.     2. Write “f(–9) = 5” as an ordered pair. ________
3. The range of a relation tells what values _____ can be.                4. “f(x)” is another name for ____________.
5. The domain of a relation tells what values _____ can be.

6. What numbers can we not take the square root of in the real numbers? ______________
7. In a word problem, the “average rate of change” is the same as the __________ and the starting point is the same as the ___________________________.

8. Given U = {1, 2, 3, 4, 5, 6, 7, 8}, A = {1, 5, 7, 8} and B = {2, 3, 4, 5, 7}, find the following:
   a) Draw the Venn diagram  b) A ∪ B  c) A ∩ B
   that represents the sets.

9. Given the relation {(-5, 3), (3, 4), (-2, -3), (0, -5)}, find the following:
   a) Domain: __________________  b) Range: ____________________
   c) Maximum of x-values: _____  d) Minimum of x-values: _____
   e) Maximum of y-values: _____  f) Minimum of y-values: _____
   g) Make a line graph of the relation on the grid to the right.

10. Is the relation {(3, 7), (2.1, -5.2), (2.2, 6), (3.1, 0)} a function? Why or why not? ______________________

11. Graph the line given by y = \(-\frac{3}{4}x + 3\)

12. Find the slope of the following lines:
   a) 7x + 5y = 18
   b) f(x) = 1.3x + 6.8
   c) y = -7 + 3.1x
   d) Passing through (3, -6) and (-1, 1).
13. Find the domains of the functions below:
   a) \( f(x) = \frac{2}{x + 8} \)  
   b) \( f(x) = 2x^2 - 5x + 1 \)  
   c) \( f(x) = \sqrt{x - 2} \)

14. Given \( f(x) = -2x - 3 \):
   a) Find \( f(7) \)  
   b) Find \( f(0) \)

15. Find the equation of the line having the following properties:
   a) \( m = -8.3, \ (0, 3.9) \)  
   b) \( m = \frac{5}{8}, \ (0, 8) \)  
   c) \( m = 4, \ \left(0, \frac{3}{4}\right) \)

16. Given the graph of the line below, find the following. (Assume each tick mark is “1”.)
   a. \( \Delta x: \) _______  
   b. \( \Delta y: \) _______  
   c. The slope of the line _______  
   d. The y-intercept of the line _______  
   e. The equation of the line _______________.  
   f. A point on the line other than the y-intercept. _______

17. Graph the line given by \( 3x + 4y = -12 \)

18. Find the y-intercepts of the following lines:
   a) \( y = -\frac{4}{7}x + \frac{1}{3} \) _______________  
   b) \(-2x + 9y = 27 \) _______________  
   c) \( 4x = 7y + 26 \) _______________

19. Write the following in slope-intercept form.
   a) \( 6x - 2y = 18 \)  
   b) \( 5x + 2y = 19 \)  
   c) \(-3x + 8y = 13 \)