

Name: \_\_\_\_\_

Date: Key

Period: \_\_\_\_\_

### Algebra Chapter 3 Vocabulary Study Guide

- D 1. arithmetic sequence  
H 2. common difference  
G 3. constant  
R 4. constant variation  
P 5. direct variation  
T 6. family <sup>of</sup> graphs  
A 7. linear equation  
L 8. linear function  
K 9. negative slope  
O 10. parent function  
B 11. positive slope  
C 12. rate of change  
M 13. root  
J 14. sequence  
F 15. slope  
E 16. standard form  
Q 17. undefined slope  
I 18. x-intercept  
S 19. y-intercept  
N 20. zero slope  
U 21. zeros

- ~~A.~~ A \_\_\_ is an equation that forms a line when it is graphed
- ~~B.~~ If the function values are increasing over the entire domain (the line rises from left to right) then the function has a \_\_\_
- ~~C.~~ \_\_\_ is the ratio that describes how much one quantity changes with respect to the change in another quantity. Often called the  $\frac{\text{change in } y}{\text{change in } x}$
- ~~D.~~ A sequence in which the difference between successive terms is constant is called an \_\_\_
- ~~E.~~ Form that is written  $Ax + By = C$  where A, B, and C are integers, A and B are both non-zero, and A is positive.
- ~~F.~~ The \_\_\_ is the ratio of the change in the y coordinate (rise) to the change in the x-coordinate (run).  $m = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$
- ~~G.~~ The C in the standard form of a linear equation is called a \_\_\_ (it is just a number)
- ~~H.~~ The difference between successive terms in an arithmetic sequence is called the \_\_\_
- ~~I.~~ The point where a graph crosses or touches the x-axis is the \_\_\_
- ~~J.~~ A \_\_\_ is a set of numbers.
- ~~K.~~ If the function values are decreasing over the entire domain (the line falls from left to right) then the function has a \_\_\_
- ~~L.~~ A \_\_\_ is a function for which the graph is a line
- ~~M.~~ The solution or \_\_\_ of an equation is any value that makes the equation true.
- ~~N.~~ If the function values are constant over the entire domain (the line is horizontal) then the function has a \_\_\_
- ~~O.~~ The simplest linear function  $f(x) = x$  is called the \_\_\_
- ~~P.~~ \_\_\_ is an equation where y varies directly as x,  $y = kx$
- ~~Q.~~ If the relation is not a function (vertical line) then the function has a \_\_\_
- ~~R.~~ The slope or the k value in a direct variation is the \_\_\_
- ~~S.~~ The point where a graph crosses or touches the y-axis is the \_\_\_
- ~~T.~~ A \_\_\_ is a group of graphs with one or more similar characteristics
- ~~U.~~ Values of x for which  $f(x) = 0$  are called \_\_\_. These values of x are located at the x-intercepts of the function