

Name: \_\_\_\_\_  
Algebra 1

Date: \_\_\_\_\_  
Band: \_\_\_\_\_

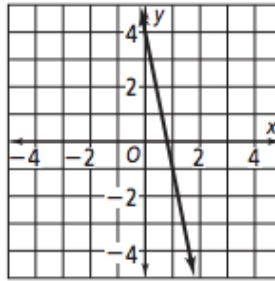
**Unit 5: Linear Functions**

**LT#1:** Find slope.

1. Find the slope of each line.
  - A. The line containing points  $(3, -6)$  and  $(4, -5)$
  
  - B. The line described by the equation  $12x + 5y = 9$

**LT#2:** Write linear equations using slope-intercept form.

2. What is an equation of the graph at the right?



3. Find the  $y$ -intercept of the graph of each equation.
  - A.  $7y - 3x = 4$
  
  - B.  $2x + 4y = 3$
  
  - C.  $17x + 2y = 42$
  
4. A long-distance company charges \$26.95 per month plus \$0.14 per minute for all in-state long distance calls. Calculate the cost in dollars to make 225 minutes of in-state long distance calls over one month.
  
5. What is the slope of the line with equation  $4x + 3y = 8$ ?

**LT#3:** Graph linear equations using intercepts.

6. Which of the following statements is NOT true for the graph of the equation  $5x + 3y = 12$ ?
- A. The  $y$ -intercept is 4.
  - B. The line has a positive slope.
  - C. The  $x$ -intercept is 2.4
  - D. The line contains the point  $(2, \frac{2}{3})$
7. Find the  $x$ -intercept of the graph of each equation.
- A.  $3x + 2y = 7$
  - B.  $2x + 3y = 7$

**LT#4:** Determine whether equations of parallel lines and perpendicular lines.

8. Find the slope of each line.
- A. The line that is perpendicular to the graph  $2x + 3y = 6$
  - B. The line that is parallel to the graph of  $-2x - 6y = 8$
  - C. The line that is parallel to the graph of  $y = \frac{1}{2}x + 7$
  - D. A line that is perpendicular to the graph of  $y = -2x - 3$
9. Line  $A$  passes through points  $(6,8)$  and  $(1, -7)$ . Line  $B$  is perpendicular to Line  $A$ . Line  $C$  is perpendicular to line  $B$ . What is the slope of Line  $C$ ?
10. Write an equation of the horizontal line through  $(5, -3)$ .
11. Write an equation of the line with a  $y$ -intercept of  $-4$  that is parallel to  $6x - 2y = 13$ .

**LT#5:** Graph an absolute value function.

**LT#6:** Translate the graph of an absolute value function.

12. Graph:  $y = |x + 2| - 4$

