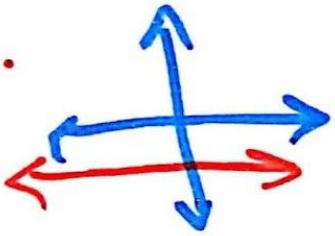
Linear functions: Practice

1. Rise = the difference in y values of 2 points on a line, true or false?
(circle one)

2. Slope equals $\frac{\text{rise}}{\text{\_\_\_\_}}$ ← fill in the blank

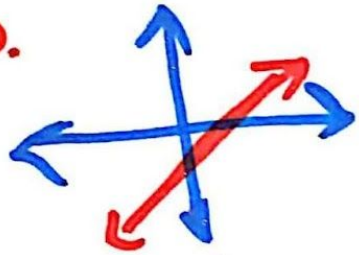
3. What kind of slope is this?

a.



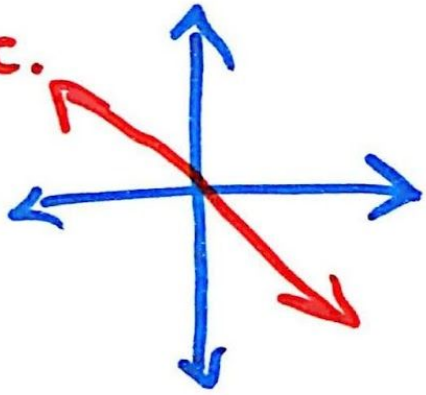
____ slope

b.



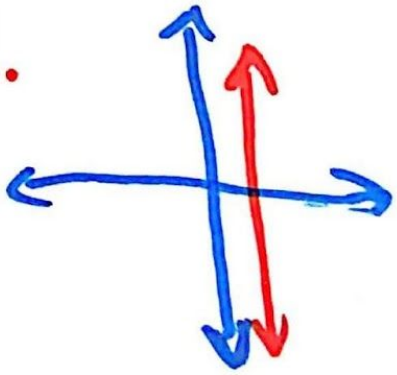
____ slope

c.



____ slope

d.



____ slope

Linear Functions: Practice Cont.

4. Find the slope:

a. (1, -2) (4, -8) b. (3, 7) (-2, -6)

5. Convert to slope intercept form:

a. $5y - 4 = 2x$ b. $3y + 8 = 4x$

6. Substitute the values into the equation:

Slope = 6 y-int = 4:

equation:

7. Write an equation from the points (3, 2) and (6, -9):

Linear functions: Practice cont.

8. Write in point-slope form:

a. slope $= \frac{3}{2}$; $(-5, 1)$ b. slope $= -3$; $(4, -2)$

9. Graph $y = \frac{5}{2}(x+3)$

10. [redacted] if a line has this equation: $y = 3x + 8$, what is a possible equation of a line parallel to this one?

11. Original line: $y = 8x + 4$

Perpendicular line: $y =$

Linear Functions: Practice Cont.

12. In the standard form of a line, a, b, and c are _____ #s and a and b ≠ _____.

13. $6x+12y=36$

graph:

14. transfer to Standard form:

a. $y=-\frac{1}{2}x+4$

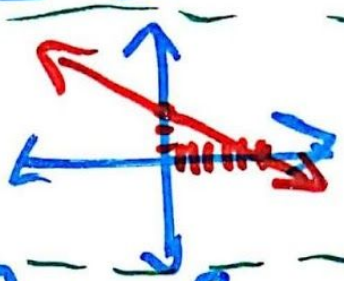
b. $y-3=\frac{1}{4}(x+2)$

15. Write an equation in standard form using (3, 6) and (−5, 4):

Linear Function: Practice answers

1. true
2. $\frac{\text{rise}}{\text{run}}$
3. a. zero slope
   b. positive
   c. negative
   d. undefined
4. a. -2 b. $\frac{13}{5}$
5. a. $y = \frac{2}{5}x + \frac{4}{5}$
   b. $y = \frac{4}{3}x - \frac{5}{3}$
6. $y = 6x + 4$
7. $y = \frac{-11}{3}x + 13$
8. a. $y - 1 = \frac{3}{2}(x + 5)$
   b. $y + 2 = -3(x - 4)$
9. 

10. $y = 3x + 4$
11. $y = \frac{-1}{8}x - 1$
12. real 0
13. $x = 6$
    $y = 3$



14. a. $2y + x = 8$
    b. $-x + 4y = 14$
15. $-x + 4y = 21$