

# Unit 4 Slope Review (part 2)

Graph.

Name: Key

1. Name the 4 types of slope.  
positive, negative, zero, undefined

2. What does m stand for? slope  
 3. What does b stand for? y-intercept

4. Formula for Slope Intercept Form:  $y = mx + b$

5. Formula for Finding Slope:  $m = \frac{y_2 - y_1}{x_2 - x_1}$

Find the slope.

6. (14, 6), (15, 9)  $\frac{9-6}{15-14}$

$\frac{3}{1}$  or 3

7. (-20, -2), (13, 16)  $\frac{16 - (-2)}{13 - (-20)}$

$\frac{18 \div 3}{33 \div 3} = \frac{6}{11}$

8. 

x	y
-3	5
-2	2
-1	-1
0	-4
1	-7

$\frac{-3-5}{-2-(-1)} = \frac{-8}{-1} = 8$

9. 

x	y
-2	5
-1	4.75
0	4.5
1	4.25
2	4

$\frac{2-5}{-2-(-1)} = \frac{-3}{-1} = 3$

10. 

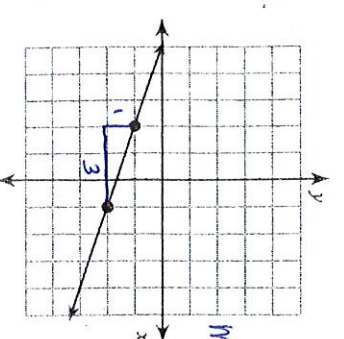
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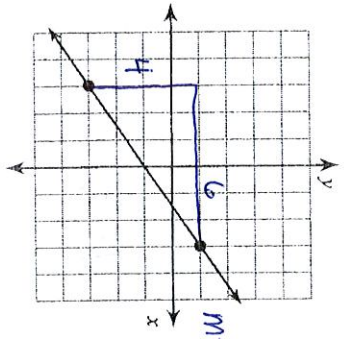
11. 

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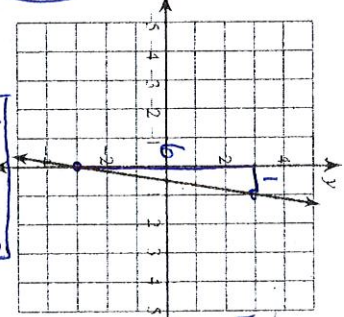
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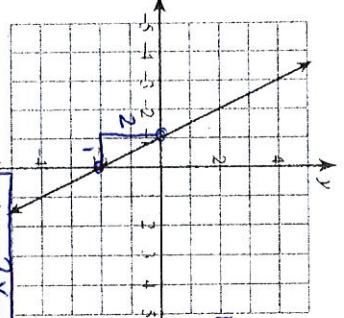
$m = -\frac{1}{3}$



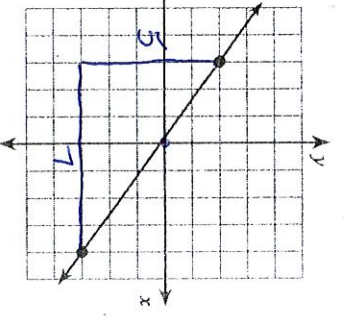
$m = \frac{4}{6} = \frac{2}{3}$



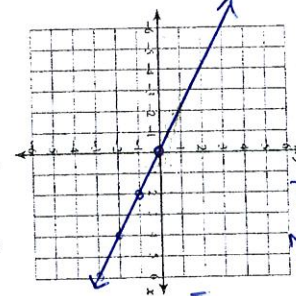
$m = \frac{1}{2}$



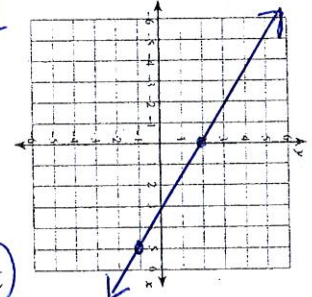
$m = \frac{2}{2} = 1$



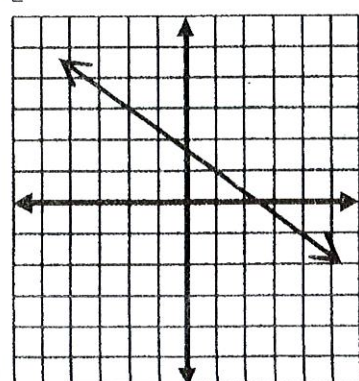
$m = \frac{2}{2} = 1$



$m = -\frac{1}{2}$



$y = -\frac{3}{5}x + 2$



Determine the equation.

pp. omit

15.

$y = -\frac{3}{5}x + 2$

23. Which is true about the given line?

- (A) Its slope is 3/2 and y-intercept of 2.
- (B) Its slope is 2/3 and y-intercept of 2.
- (C) Its slope is 3/2 and y-intercept of -2.
- (D) Its slope is 2/3 and y-intercept of -2.

Convert to slope-intercept form and name the slope and y-intercept

20.  $2 + y = 3x$        $y = 3x - 2$        $m = 3$        $b = -2$

21.  $y - 2x = 9$        $y = 2x + 9$        $m = 2$        $b = 9$

22.  $x + y = -3$        $y = -x - 3$        $m = -1$        $b = -3$

Write an equation.

12. slope =  $\frac{2}{7}$ , y-intercept = 1  
 $y = \frac{2}{7}x + 1$

13. slope = -5, y-intercept = -3  
 $y = -5x - 3$

Write the slope-intercept form

24.  $8x - 5y = -30$

$y = \frac{8}{5}x + 6$   $m = \frac{8}{5}$   $b = 6$

25.  $10x + y = 4$

$y = -10x + 4$   $m = -10$   $b = 4$

26.  $4x + 5y = -20$

$y = -\frac{4}{5}x - 4$   $m = -\frac{4}{5}$   $b = -4$

27.  $x + y = -1$

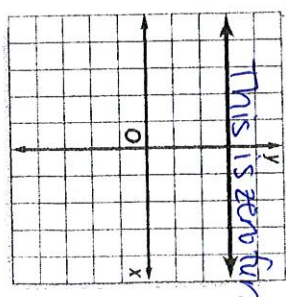
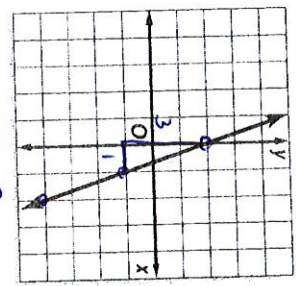
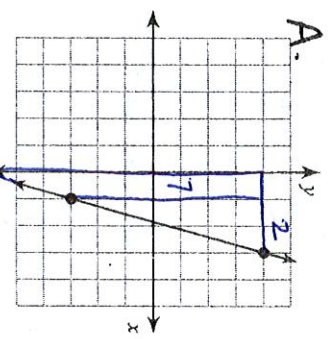
$y = -x - 1$   $m = -1$   $b = -1$

28.  $3x + 5y = 30$

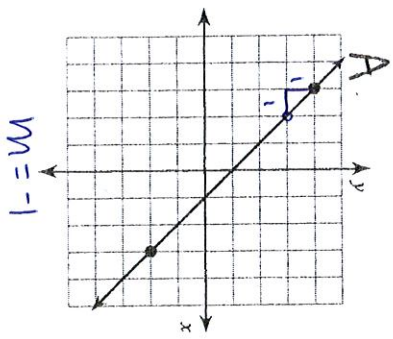
$y = -\frac{3}{5}x + 6$   $m = -\frac{3}{5}$   $b = 6$

31. Identify the slopes in order from least to greatest.  $-\frac{3}{8}$ ,  $\frac{0}{C}$ ,  $\frac{7}{2}A$

C.

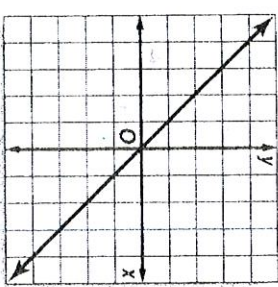


29. Which slope is larger? A or B



B.  
 $(4, 6)$  and  $(1, 3)$   
 $m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 6}{1 - 4} = \frac{-3}{-3} = 1$   
 Greater

32. Find the equation of the line.



$m = \frac{-1}{1}$   
 $b = 0$

$y = -1x$   
 or  
 $y = -x$

30. Which slope is smaller? Cor D

C, slope =  $\frac{3}{5}$

y-intercept = 6

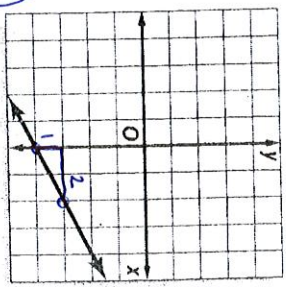
D. (5, 0) and (2, -3)

$\frac{-3 - 0}{2 - 5} = \frac{-3}{-3} = 1$

C  $\frac{3}{5} < 1$   
 D

33. Find the equation of the line.

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



$m = \frac{1}{2}$   
 $b = -4$

34. Compare the slopes of #32 and #33. Which is greater? #32 or #33

$m = -1$  or  $m = \frac{1}{2}$