

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) $\frac{16 - (-2)}{13 - (-20)} = \frac{18}{33} = \frac{6}{11}$

8.

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

 $\Delta x = 1$ $\Delta y = -3$
 $m = \frac{-3}{1} = -3$

9.

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

 $\Delta x = 1$ $\Delta y = -0.25$
 $m = \frac{-0.25}{1} = -0.25$

10.

11.

Determine the equation.

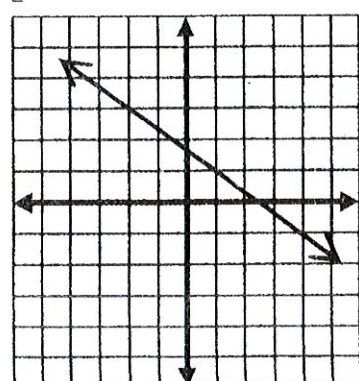
12.

13.

14.

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.

16. $x + 2y = 0$
 $2y = -x$
 $y = -\frac{1}{2}x$

$m = -\frac{1}{2}$
 $b = 0$

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

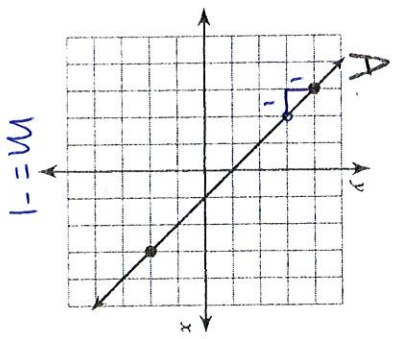
13. slope = -5, $y = -5x - 3$
y-intercept = -3

pp. omit

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. $3x + 5y = 30$ $y = -\frac{3}{5}x + 6$ $m = -\frac{3}{5}$ $b = 6$

29. Which slope is larger? A or B

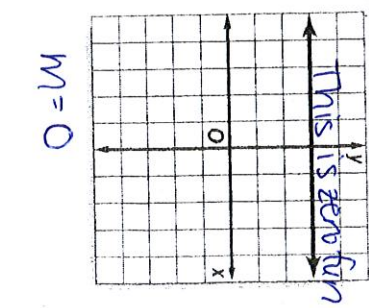
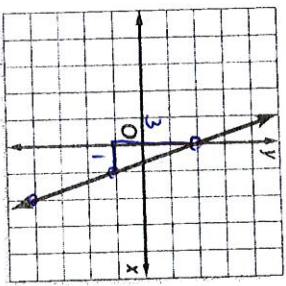
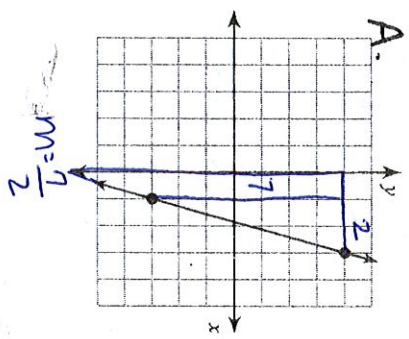


B.

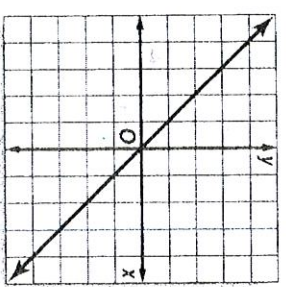
$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 6}{1 - 4} = \frac{-3}{-3} = 1$$

Greater

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



32. Find the equation of the line.



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

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

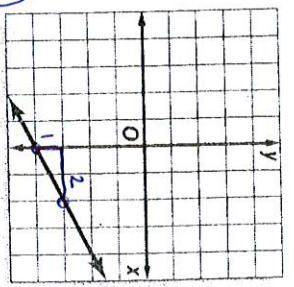
30. Which slope is smaller? Cor D

- C, slope = $\frac{3}{5}$
- D, (5, 0) and (2, -3)

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

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. $m = -1$ or #32 or #33 $m = \frac{1}{2}$ which is greater?

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