88

ough the given

y

-3)

(-3)

(-14)

(4)

(7)

no slope or undefined slope

y

-5)

(-5)

(-12)

1

of the line.

HOMEWORK

Directions: The points in the table lie on a line. Find the slope of the line.

1. Δx +2 +2 +2

x	1	3	5	7
y	2	5	8	11

Δy +3 +3 +3

$m = \frac{\Delta y}{\Delta x} = \frac{3}{2}$

2. Δx +4 +4 +4

x	−6	−2	2	6
y	8	5	2	−1

Δy −3 −3 −3

$m = \frac{\Delta y}{\Delta x} = \frac{-3}{4}$

3. The cost y (in dollars) to rent a kayak is proportional to the number x of hours that you rent the kayak. It costs $27 to rent the kayak for 3 hours. $m = \frac{\Delta y}{\Delta x} = \frac{27}{3} = \$9/hr$

a. Write an equation that represents the situation. $y = 9x$

b. Interpret the slope. It cost $9 an hour to rent the kayak

c. How much does it cost to rent the kayak for 5 hours? Use the equation in part a.

$y = 9x$

$y = 9(5)$

$y = \$45$

Use pages 83 - 84 to show your work.

4. Solve for x:

$$\frac{4x-3}{8} = \frac{2x}{5}$$

5. Solve for k:

$$\frac{6}{5}k + \frac{1}{3} = k + \frac{7}{3}$$

Include Textbook page 578 #s 13 – 18, and page 600 #s 5 – 7.
Please start studying for your Quarterly!

Hw: Slope Formula

4.) $\frac{4x-3}{8} = \frac{2x}{5}$ *cross multiply means set the 2 cross products equal then solve for x

$2x(8) = 5(4x-3)$

$16x = 20x - 15$

$-20x \quad -20x$

$\frac{-4x}{-4} = \frac{-15}{-4}$

$x = 3\frac{3}{4}$

p.600

*7.)

$-2\left[-\frac{1}{2}x + y = 10\right]$

$x - 2y = -20$

$-x \qquad -x$

$\frac{-2y}{-2} = \frac{-1x}{-2} - \frac{20}{-2}$

$y = \frac{1}{2}x + 10$

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

$b = 10$

5.) LCD 15. $\left[\frac{6}{5}K + \frac{1}{3} = \frac{1K}{1} + \frac{7}{3}\right]$

$\times 3 \quad \times 5 \quad 15 \quad \times 5$

$18K + 5 = 15K + 35$

$-15K \qquad -15K$

$3K + 5 = 35$

$-5 \quad -5$

$\frac{3K}{3} = \frac{30}{3}$

$K = 10$

p.578 #13-18

13.) $m = \frac{y_1 - y_2}{x_1 - x_2}$

x y
(4, -1)
(-2, -1)

$m = \frac{(-1) - (-1)}{(4) - (-2)}$

$m = \frac{0}{6} = 0$ zero slope

14.) (5, -3) & (5, 8)

x y x y

$m = \frac{y_1 - y_2}{x_1 - x_2}$

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

$m = \frac{-11}{0}$ = no slope

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15.) $(-7, 0)$ & $(-7, -6)$

$m = \frac{(0) - (-6)}{(-7) - (-7)}$

$m = \frac{6}{0}$ = no slope

16.) $(-3, 1)$ & $(-1, 5)$

$m = \frac{y_1 - y_2}{x_1 - x_2}$

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

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

17.) $(10, 4)$ & $(4, 15)$

$m = \frac{y_1 - y_2}{x_1 - x_2}$

$m = \frac{(4) - (15)}{(10) - (4)}$

$m = \frac{-11}{6}$

18.) $(-3, 6)$ & $(2, 6)$

$m = \frac{y_1 - y_2}{x_1 - x_2}$

$m = \frac{(6) - (6)}{(-3) - (2)}$

$m = \frac{0}{-5} = 0$

p. 600 #5-7

$y = mx + b$

5.) $2x + y = 17$

$-2x \qquad -2x$

$y = -2x + 17$

$m = \frac{-2}{1}, b = 17$

6.) $\left[5x - y = \frac{1}{4}\right] 4$

$20x - 4y = 4$

$-20x \qquad -20x$

$\frac{-4y}{-4} = \frac{-20x}{-4} + \frac{1}{-4}$

$y = 5x - \frac{1}{4}$

$m = \frac{5}{1} \quad b = \frac{-1}{4}$

7.) on page 83