**Slope/Slope-Intercept Form Quiz Review (2.1, 2.2, 2.3, 2.5) Name:**

**Rate of change: The rate of change is constant in each table or graph. Find the rate of change for each situation. Don’t forget units!**

|  |  |
| --- | --- |
| **Time (days)** | **Cost ($)** |
| 3 | 75 |
| 4 | 100 |
| 5 | 125 |
| 6 | 150 |

**1. 2.**

**Slope: Find the slope of the line.**

**3. 4.**

**\*\***What is the slope of a line that is parallel to #3? \_\_\_\_\_\_\_\_ Perpendicular? \_\_\_\_\_\_\_\_\_\_

**Find the slope of the line that goes through the following points:**

**5.** (1, 7), (10, 1) **6.** (-3, 4), (-4, -6)

**Identify the slope and y-intercept of the line:**

**7.**  4x – 3y = 9 **8.** $y-3=-\frac{2}{5}(x+5)$



**9**. Write an equation for the line in slope-intercept form:

 **10.** Graph using a table:$ y=\frac{3}{4}x-3$



|  |  |  |  |
| --- | --- | --- | --- |
| **x** | $$y=\frac{3}{4}x-3$$ | **y** | **(x,y)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**11. Graph the equation using slope and y-intercept. No table! y =** $-\frac{2}{5}x+1$



**12.** Suppose a town has a population of 5,000 residents but that the population is decreasing by 200 people each year.

**a)** Define variables for this situation.

**b)** Write an equation in slope-intercept form.

**c)** Use your equation to find how many people live in the town after 11.5 years.

**13.** Is the point (-8, 3) a solution to the equation y = -2x – 19? Show math evidence.