

## Appendix E: Post-test

Name: \_\_\_\_\_  
Math 8 | Chapter 3 Quiz

**Rearrange equation into  $y = mx + b$  form, then graph the line.**

1.  $y = 8 - 4x$

2.  $-5x + y = 6$

3.  $2y = -6x + 10$

4.  $-8x - 4y = 12$

5. Mrs. Smith travels from to NYC to see the Rockettes. She has to drive 320 miles and because of snowy weather, she travels at a constant rate of 40 miles per hour. Her trip can be modeled by the equation

$$y = 320 - 40x.$$

- Graph the equation.
- Interpret the slope and y-intercept.

6. Use the table below:

Number of Cookies	0	1	2	3	4
Cost (\$)	3	6	9	12	15

- Find the slope and y-intercept.
- Interpret the slope and y-intercept.

**Find the x-intercept and y-intercept.**

1.  $4x + 2y = 16$

2.  $3y - 15x = 24$

**Find the x-intercept and y-intercept, then graph the line.**

1.  $5x + 10y = 40$

2.  $6y + 3x = -36$

Write Equations for each of the following....

1. Has a slope of 4 and a y-intercept 7. Put your answer in slope-intercept form.
2. Passes through (3, -1) and has a slope of 4. Put your answer in slope-intercept form.
3. Passes through (4, 5) and has a slope of 6. Put your answer in standard form.
4. Passes through (-4, 5) and (0, 2). Put your answer in standard form.

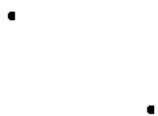
5. Write an equation in slope intercept form for the line shown.

6. One day in town in January, the temperature is  $15^{\circ}$  and is expected to fall  $2^{\circ}$  each hour during the night. The equation  $y = 15 - 2x$  represents the temperature  $y$  after  $x$  number of hours during the night.

a) Graph the equation on the axes provided. (using the intercepts method)

b) Interpret the  $x$  and  $y$  intercepts.

7. Which equation represents the line that is graphed below? (hint – the two points on the graph will help with slope and a point!)



- (1)  $y - 3 = \frac{-2}{3}(x - 3)$
- (2)  $y - 4 = \frac{-2}{3}(x - 0)$
- (3)  $y - 4 = \frac{2}{3}(x - 3)$
- (4)  $y - 3 = \frac{2}{3}(x - 3)$