## Problem Set #3.3 - Finding Equations of Lines

Name: \_\_\_\_\_

Find the equation of each line given the information provided. Graph each line on graph paper.

## Graph #1 (Questions 1 – 9)

1.) Slope =  $\frac{3}{4}$  and y-intercept = -8



- 2.) Slope = 1 and y-intercept = 1
- 3.) Slope =  $\frac{1}{2}$  and y-intercept = 0
- 4.) Slope = -2 and containing (4,1)
- 5.) Slope =  $\frac{3}{4}$  and containing (8,-3)
- 6.) Passes through (-1,13) and (2,1)
- 7.) Passes through (-5,-6) and (3,-6)
- 8.) Passes through (3,-2) and (6,0)
- 9.) Passes through (-2,1) and is parallel to 3y + 9x = 15.

## Graph #2 (10 – 17)

- 10.) Passes through (3,-4) and (3,7)
- 11.) Parallel to 4y = 3x 8 and has a *y*-intercept of 2.
- 12.) Parallel to 3y = 3 2x and has a *y*-intercept of 5.
- 13.) Passes through (-5,7) and is parallel to y = 4 3x.
- 14.) Passes through (0,2) and is parallel to 6y = 5x 24.
- 15.) Passes through (-7,-1) and (-7,0)
- 16.) Parallel to the y-axis containing (4,7).
- 17.) Parallel to the x-axis containing (4,7).
- 18.) A line has a slope of -2 and contains P(3,4) and Q(-4,a). Find the value of a.

