**Writing Linear Equations: (Given Two Points or One Point and the Slope)**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Slope Intercept Form:

Point Slope Form:

Examples:

1. Write an equation of a line that has a slope of 5 and passes through the point (6,2).
2. Write an equation of a line that has a slope of -2 and passes through the point (-3,1).
3. Write an equation of a line that passes through the points (-4,-8) and (0,9).
4. Write an equation of a line that passes through the points ($\frac{1}{2}, \frac{1}{2}$) and (-3,-3).
5. Sahil and his friend went to an arcade to play vintage video games. All of the video games in the arcade cost the same amount to play. Sahil played 12 games and spent $9, his friend played 16 games and spent $12. Model this situation with an equation where the number of video games played is a function of the money spent at the arcade.

Independent Practice:

1. Write an equation of a line that has a slope of $\frac{1}{2}$ and passes through the point (-7,-4).
2. Write an equation of a line that has a slope of $-\frac{3}{5}$ and passes through the point (1,-5).
3. Write an equation of a line that passes through the points (3,2) and (1,3).
4. Write an equation of a line that passes through the points (-2,0) and (5,-1).
5. A school fundraiser is selling candy bars. Sonya buys 3 candy bars and pays $4.50. Thomas buys 5 candy bars and pays $7.50. Model this situation with an equation where the number of candy bars is a function of the cost.