$\qquad$

## Problem Set 2.1

1) Write the equation that is graphed in point slope, slope intercept, and standard form.

Point Slope: $\qquad$

Slope Intercept: $\qquad$

Standard: $\qquad$

2) Write the equation of the line that is PERPENDICULAR to the line $3 x-y=8$ and passes through the point $(-7,4)$ in POINT SLOPE FORM. Box your final answer.

3) Write the equation of the line that contains the points $(-5,2)$ and $(-4,1)$ in SLOPE INTERCEPT FORM. Box your final answer. Then graph the line.


4 - 6] Graph the quadratic functions by graphing their vertex and at least two other points. Give their axis of symmetry, vertex, $y$ intercept, domain, and range.
4) $f(x)=-2(x+3)^{2}-4$

Axis of Symmetry: $\qquad$

Vertex: $\qquad$
y-intercept: $\qquad$

D: $\qquad$ R: $\qquad$

5) $g(x)=x^{2}-10 x+25$

Axis of Symmetry: $\qquad$

Vertex: $\qquad$
$y$-intercept: $\qquad$

D: $\qquad$ R: $\qquad$

6) $f(x)=3(x-1)(x+5)$

Axis of Symmetry: $\qquad$

Vertex: $\qquad$

$y$-intercept: $\qquad$

D: $\qquad$ R: $\qquad$

