## Quadratic Equations: Standard and Vertex Forms

Name:
Due: Thursday 9.1.2016

1. Find axis of symmetry

$$
y=2 x^{2}+36 x+170
$$

2. Find axis of symmetry

$$
x^{2}-12 x+y+40=0
$$

3. Find axis of symmetry and vertex

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

4. Describe the transformations

$$
f(x)=-\frac{1}{4}(x-1)^{2}+4
$$

5. Graph this equation $f(x)=-\frac{1}{4}(x-1)^{2}+4$ by hand (no graphing calculator)? Hint:
Create a table.

