Find the axis of symmetry and vertex of each function.

1.
$$y = x^2 - 6x + 11$$

2.
$$y = -x^2 - 10x$$

Tell whether the functions have a max or min. Then, find the max and min value.

3.
$$y = x^2 + 7x + 8$$

4.
$$y = -5x^2 + 7$$

Graph each function. Label the axis of symmetry and vertex.

5.
$$y = x^2 - 8x + 13$$

6.
$$-x^2 - 8x - 13$$



