

Q4HW3 - All work on looseleaf or graph paper.

Date_____ Period_____

Identify the vertex, focus, axis of symmetry, and directrix of each parabola. Then sketch the graph.

1) $y = (x + 2)^2 - 1$

2) $y = -\frac{1}{4}(x - 2)^2 + 5$

3) $y = -x^2 - 2$

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

5) $y = -x^2 + 6x - 14$

6) $y = x^2 + 6x + 11$

7) $y = -x^2 + 2x - 2$

8) $y = x^2 - 10x + 21$