(C1-2.1) Name:

Homework Questions 1 – Plotting Quadratic Equations

1. Plot the following quadratic equations on graph paper (take the values of x from 4 to -4)

   a) $y = (x + 2)^2$

   b) $y = -x^2$

   c) $y = x^2 + 3$

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

   e) $y = x^2 - x - 6$

2. State the minimum value of y for each of the graphs drawn above and the value of x at this point.

   a) $y = (x + 2)^2$

   b) $y = -x^2$

   c) $y = x^2 + 3$

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

   e) $y = x^2 - x - 6$

3. State the line of symmetry for each of the graphs drawn above

   a) $y = (x + 2)^2$

   b) $y = -x^2$

   c) $y = x^2 + 3$

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

   e) $y = x^2 - x - 6$