

D1 – Algebra 3 – 4 Homework

For each equation in vertex form below please do the following:

- a. Identify the vertex
- b. Identify and solve for the x – intercepts
- c. Identify and solve for the y – intercept
- d. Identify if the parabola opens up (minimum) or down (maximum)
- e. Change the equation from vertex form to standard form
- f. Sketch a graph

1.) $y = (x + 8)^2 + 7$

2.) $y = -(x - 1)^2 - 6$

3.) $y = 2(x + 9)^2 + 8$

4.) $y = -0.5(x - 3)^2 - 8$

5.) $y = 3(x + 2)^2 - 1$