

Name: _____

Date: _____

Learning Goal 3.3

Convert standard form of the quadratic equation to vertex form by completing the square.

Convert the following quadratic equations to vertex form. Find the domain, range, vertex, y – intercept, the equation for the axis of symmetry, and the maximum or minimum value.

a. $f(x) = 2x^2 - 10x - 38$

b. $g(x) = 5x^2 + 18x - 68$

c. $h(x) = -2x^2 - 14x - 66$

d. $j(x) = -10x^2 + 21x - 80$