

Quadratics 4b – Completing the Square

Vertex Form – Homework #15

Name _____

Per _____ Date _____

For each function below:

- a. Describe how the parent function $f(x) = x^2$ is transformed.
- b. Identify the vertex of this parabola.
- c. Determine if the function has a maximum or minimum, and its value.
- d. State the domain and range of the function

For #1 & 2 only: Sketch the graph. Find the x -intercepts of the parabola, if there are any.

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

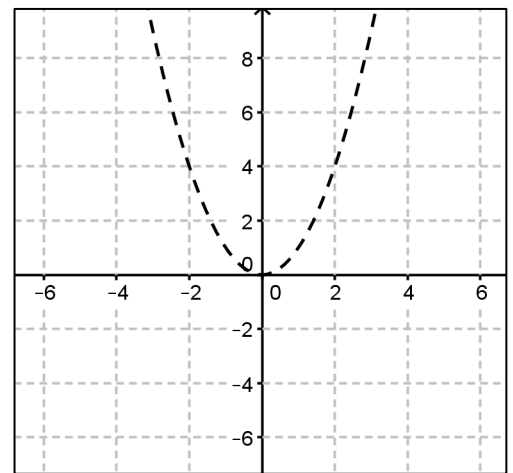
$a = \underline{\hspace{2cm}}, h = \underline{\hspace{2cm}}, k = \underline{\hspace{2cm}}$

Vertex: _____

_____ value of _____

Domain: _____

Range: _____



2. $g(x) = 2(x+3)^2 - 8$

$a = \underline{\hspace{2cm}}, h = \underline{\hspace{2cm}}, k = \underline{\hspace{2cm}}$

Vertex: _____

_____ value of _____

Domain: _____

Range: _____

