

Algebra 1 Chapter 9 Test Version B
Show All Work for Full Credit!!!!

Name: _____

1. Solve by Factoring:

$$x^2 + 7x + 12 = 0$$

2. Solve by the Quadratic Formula:

$$x^2 + 7x + 12 = 0$$

3. Solve by Square Roots:

$$3x^2 - 48 = 0$$

4. Find the characteristics for the graph then graph the quadratic:
SHOW ALL WORK!!!!

$$y = x^2 - 10x + 24$$

Axis of Symmetry: _____

Vertex: _____

Zeros: _____

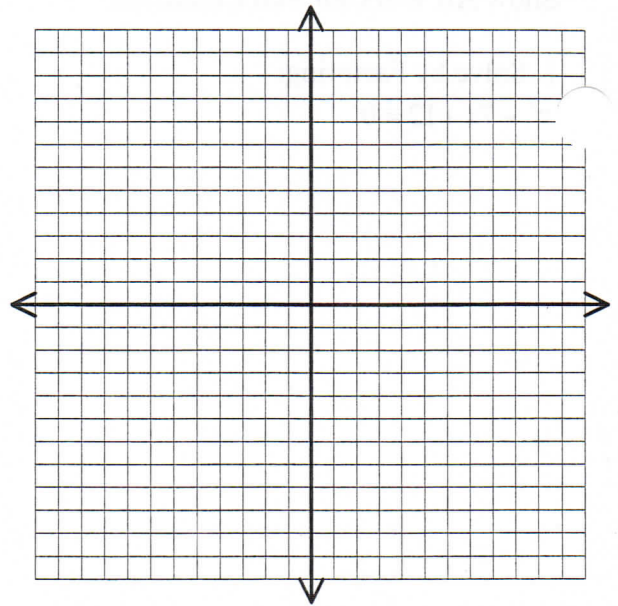
Opens Up or Down: _____

Max or Min: _____

Domain: _____

Range: _____

Y-Intercept: _____



5. The height h of an arrow in feet is modeled by $h = -16t^2 + 63t + 4$ where t is time in seconds since the arrow was shot.

a. What is the maximum height and when does it occur?

b. How long does it take the arrow to reach the ground?

c. How long until the arrow is 12 feet in the air?