

Graphing Quadratic Functions Quiz A

Name _____

Graph each of the following quadratic functions.

- a) Show your work to find the vertex of the function
- b) Give the axis of symmetry
- c) Give the y-intercept
- d) Show your work to find the x-intercepts of the function

1. $y = x^2 - 6x + 5$

2. $y = -x^2 - 4x - 4$

3. $y = 4x^2 + 8x$

4. $y = 2x^2 - 4$

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5. $y = 2x^2 - 5x + 1$

6. You and a friend are hiking in the mountains. You want to climb a ledge that is 20 feet high. The height of the grappling hook you throw is given by the function $h = -16x^2 + 32x + 5$.

a) What is the maximum height, h , of the grappling hook?

b) At what time, t , does the grappling hook hit the ground?