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?