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4. What are the vertex, axis of symmetry, maximum or minimum value, and range of $y = 3x^2 + 6x - 1$?

5. What is the graph of $y = x^2 + 8x + 4$?

6. Write $y = -5x^2 + x + 1$ in vertex form.

7. **Do you UNDERSTAND?** A parabolic arch sculpture is on top of a city bank. A model of the arch is $y = -0.005x^2 + 0.3x$ where x and y are in feet.

a. What is the distance from the highest point of the arch to the ground?

b. What is the width of the bank building?

