

a. On the diagram above make a sketch of the trajectory of the ball and indicate Δx and Δy for the ball on your diagram.

- b. How much time elapses from launch until impact?
- c. Sketch a **quantitative** graph of $v_{\rm x}$ vs t.

d. Sketch a $\ensuremath{\textbf{quantitative}}$ graph of $\ensuremath{\textbf{v}_y}$ vs t.

- e. How far from the base of the building does the ball hit the ground?
- f. How fast is the ball traveling when it hits the ground?