# Horizontal Projectile Motion Intro Worksheet

y-direction:              x-direction:

$$d = v_i t + \frac{1}{2}at^2 \qquad d = v_i t + \frac{1}{2}at^2$$

1. A ball is dropped from 4 meters high. How long does it take for the ball to reach the ground?

2. A ball is launched horizontally at 2 m/s from 2 meters high. How long does it take for the ball to reach the ground?

3. A ball is launched horizontally at 2 m/s from 2 meters high. How far away does the ball hit the ground?

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