Falling Object From Sky

June 15, 2022

Throw object up to the sky, let the initial velocity is v_0 the gravity is

$$g = \frac{9.8m}{s^2}$$

The velocity is

$$v = v_0 - gt$$

The displacement is

$$s(t) = s_0 + v_0 t - \frac{1}{2}gt^2$$

When the velocity will be zero?

$$0 = v_0 - gt$$

$$t = \frac{v_0}{g}$$

If the initial velocity is $v_0 = 100m/s$ then the velocity is zero?
According to above formula $t = \frac{v_0}{g}$

$$t = \frac{100m/s}{9.8m/s^2}$$

Theorem 1. *This is a test only*