1-29
Use the equation in Problem 1-28 to find the distance traveled by a body falling with an initial downward velocity of 25.0 ft/s for 15.0 s.

Solution.

$$y = v_0 t + \frac{1}{2} g t^2$$

$$= (25.0 \text{ ft/s})(15 \text{ s}) + \frac{1}{2}(32.2 \text{ ft/s}^2)(15 \text{ s})^2$$

$$= 4000 \text{ ft}$$