

Exercise 7-4

$$x = x_0 + v_0 t + \frac{1}{2} a t^2$$

Choose $x_0 = 0$.

$$\begin{aligned} \therefore x &= (2.00 \text{ m/s})(10.0 \text{ s}) + \frac{1}{2}(3.00 \text{ m/s}^2)(10.0 \text{ s})^2 \\ &= 170 \text{ m} \end{aligned}$$