Answer on Question #63786-Physics-Mechanics

How far below an initial straight-line path will a projectile fall in five seconds?

Solution

The distance below an initial straight-line path will a projectile fall in five seconds is

$$h = \frac{gt^2}{2} = \frac{9.8 \cdot 5^2}{2} = 122.5\ m.$$

Answer: $\mathbf{122.5}\ \boldsymbol{m}$.