

Cycle 16 Kinematics

Review



1. The student, running at 8 m/s, slides to a halt over the course of 12 meters. What was his acceleration?



2. Find the original velocity of the motorcycle.

3. A sports car starts from rest and accelerates at  $8\text{ m/s}^2$  up to 32 m/s. How long did the acceleration take?



4. A batter unintentionally hits a baseball directly upward at 40 m/s. The acceleration due to gravity is  $10\text{ m/s}^2$  downward. How far does the baseball travel in the first 2 seconds?