

Describing Motion: Velocity

Chpt 3 rev 3

1. What is the velocity of an object that travels from the +35 m mark to the -15 m mark in 2.50 s?
2. You calculate that a bullet travels 225 m in 0.700 s. a) What is the velocity of the bullet? b) What is its velocity in km/hr?
3. a) How much time does it take a bullet traveling at 321 m/s to travel 50.0 m? b) What is its speed in mph? (there are 1610 m in 1 mile)
4. A sub-atomic particle can travel at 1.56×10^8 m/s. How long does it take for it to travel across the molecule if the distance is 2.20×10^{-7} m?
5. Bad Billy runs at 23 km/hr and slips and falls and comes to rest in 1.6 s. a) What is his acceleration? b) How far does he slide?
6. A ball falls off a cliff and hits the ground 3.7 seconds later. A) What velocity does the ball hit the ground at?...b) How high is the cliff?
7. A bullet accelerates from rest to 450 m/s in a 1.0 m barrel. A) How long did it take?...What is the acceleration of the bullet in the barrel?