

Another Great Review

Chpt. 3 rev S

Vel. of light = 3.00×10^8 m/s Vel. of sound = 340. m/s
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Following the basic problem solving approach to solve the following problems: List all data including vector diagrams, list type motion, choose appropriate formula and list it, insert values into formula, and solve problem. All steps must be included to get full credit. Remember, acceleration due to gravity is -10 m/s^2

1. A bullet from a gun travels at 315 m/s (after it leaves the barrel). How far does it go in 0.520 seconds?
2. A bullet goes from rest to 355 m/s in 3.84×10^{-3} s. What is the acceleration of the bullet in the gun? How long is the barrel?
3. You throw a rock from a cliff at -12.1 m/s and it hits the ground after 5.5 seconds. How fast is it going when it hits?...How far did it fall?