

LSN # 22 Answers

Lesson 22 - Motion in Space II

Complete last lesson's problems and review the lesson objectives.

Problem Solving Problems

1. Consider Problem Solving Problem I from the previous lesson. Add to the scenario a wind component that is blowing horizontally, in a direction directly opposite to the direction of the projectile launch. How would you change the kinematics equations you developed in order to compensate for a wind component?

$$x(t) = x_0 + (v_0 \cos \theta - v_{\text{wind}})t$$

$$y(t) = \text{No change}$$

ANS.