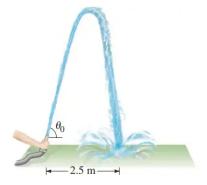
Range Equation Practice Problems

1. A projectile is fired with an initial speed of 36.6 m/s at an angle of 42.2 degrees above horizontal on a long flat firing range. What is the total horizontal distance (that is, range) covered by the projectile? Compare your answer with question 2(c) on the "Projectile Motion Practice Problems."

2. A fire hose held near the ground shoots water at a speed of 6.5 m/s. Find two angles an which to point the nozzle in order to make the water land 2.5 m away. ¹



¹This problem is adapted from Chapter 3, problem #23 in Giancolli *Physics with Applications*, 7th ed.