Projectile Motion Practice Problems

- 1. A marble rolls off a 0.8-meter tall table at a horizontal speed of 3 m/s.
 - (a) How far from the base of the table will the marble land?
 - (b) What is the marble's velocity (magnitude and direction) the moment before it hits the ground?

- 2. 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.
 - (a) What is the maximum height reached by the projectile?
 - (b) How much time is the projectile in the air?
 - (c) What is the total horizontal distance (that is, range) covered by the projectile?