Horizontal Projectiles- notes!!!!

**Formulas: d=1/2at2 a= v=d/t**

1) A ball is thrown from a 22 m high cliff horizontally at 16 m/s.

a. How much time will it take for the ball to reach the ground?

b.How far from the base of the cliff will it land?

2) The same ball in problem #1 is thrown on the moon, where g = 1.67 m/s2.

a. How much time will it take to hit the ground now?

b. How far away will it land?

3) A cannon is fired horizontally at 150 m/s from a castle wall that is 7.2 m high. How far away will the cannonball land?

4) A rock is thrown horizontally at 24 m/s from a cliff. It lands 56 m from the base. How high is the cliff?