**Projectile Motion Problems**

1. A ball is thrown straight up from the top of a 128 foot tall building with an initial speed of 32 feet per second. The height of the ball as a function of time can be modeled by the function h(t) = –16t2 + 32t + 128. How long will it take for the ball to hit the ground?
2. A ball is thrown straight up from the top of a 288 foot tall building with an initial speed of 48 feet per second. The height of the ball as a function of time can be modeled by the function h(t) = –16t2 + 48t + 288. When will the ball reach a height of 320 feet?