

## CALCULUS/PHYSICS/FUN PROBLEM

A light shines from the top of a pole 50 feet high. A ball is dropped from the same height from a point 30 feet away from the light. How many seconds, after the ball is dropped, is the shadow of the ball moving the speed of sound? Assume the ball falls a distance  $s = 16t^2$  feet in  $t$  seconds.

