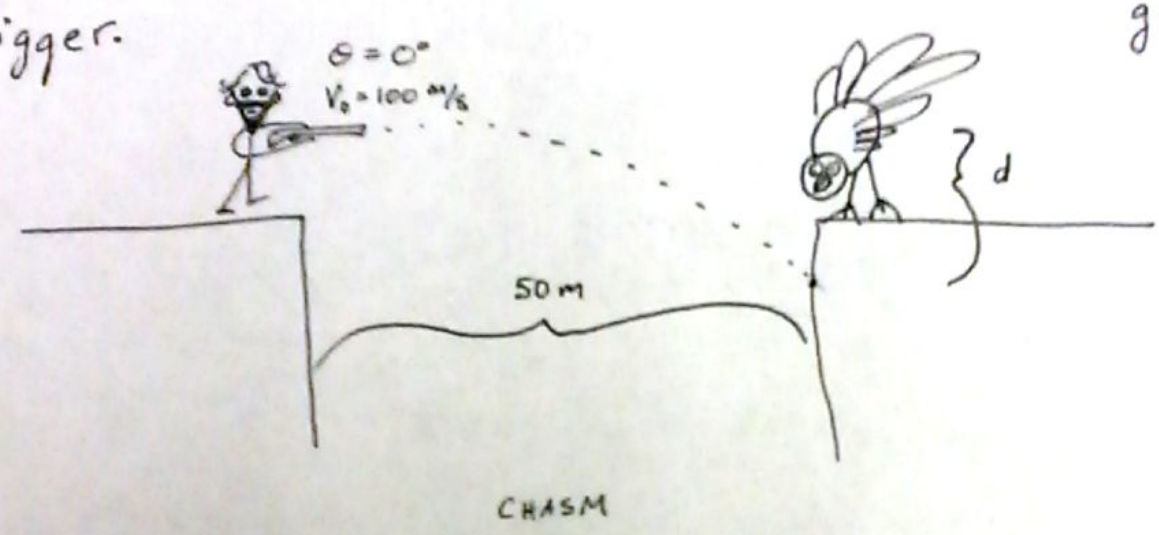
Mr. Barker went turkey hunting before Thanksgiving. As he was aiming at a turkey across a wide chasm (picture), the Turkey fell! In fact, the turkey fell at the exact same time Mr. Barker pulled the trigger.

$g = 10\ m/s^2$



CHASM

1.) If the chasm is 50 meters wide, how far will the bullet drop before hitting the opposite side? $V_0 = 100\ m/s$ $\theta = 0$

2.) How much time will the bullet spend in the air?

3.) what is the bullet's impact speed?

4.) Will the bullet hit the turkey? Why or why not?
(assume no air resistance)