

## PHYSICS 12

### PROJECTILE MOTION

1. A rock is fired from a slingshot at an angle of  $65^\circ$  above horizontal. The rock strikes the ground 8.0 s later at an altitude 30.0 m below the height at which it was released.
  - (a) At what initial velocity was the stone released?
  - (b) How far horizontally does the stone go before striking the ground?
  - (c) What is the final velocity of the rock just before it hits the ground?