

Name: _____

Date: _____

MCHS Honors Physics 2014-2015

Projectile Motion 3

- 1) Two crickets, Adam and Levine, jump from the top of a cliff. Adam just drops and reaches the ground in 3.50 s , while Levine jumps out horizontally with an initial speed of 95.0 cm/s . How far from the base of the cliff will Levine hit the ground?

- 2) On level ground, Yosemite Sam™ fires a bullet out of his gun with an initial velocity of 50.0 m/s at an angle of 60.0° above the horizontal.
- a. Find the horizontal and vertical components of the bullet's initial velocity.

- b. How long does it take the bullet to reach its highest point?

- c. Find its maximum height above the ground.

- d. How far from its firing point does the bullet land?

- e. At its highest point, find the horizontal and vertical components of its acceleration and velocity.

