

**Directions:** Answer each of the following questions and show all work.

1. A long jumper leaves the ground with an initial velocity of 12 m/s at an angle of 28-degrees above the horizontal. Determine the:

a) time of flight

b) the horizontal distance

c) and the peak height of the long-jumper.



2. A football is kicked with an initial velocity of 25 m/s at an angle of 45-degrees with the horizontal. Determine the:

a) time of flight

b) the horizontal displacement

c) and the peak height of the football.

