Worksheet #1

PROJECTILES

Name: _____

1. A rock is thrown with a velocity of 23.5 m/s at an angle of 22.5° to the horizontal. Find the horizontal and vertical velocity components.

2. A ball is thrown with an angle of 12.0° to the horizon with a speed of 15.0 m/s. What are its horizontal and vertical components?

3. How long is the rock from problem #1 in the air?

4. A bowler bowls his bowling ball off the top of the Grand Canyon (725 m) at a horizontal speed of 25.0 m/s. How long before the ball hits the bottom of the canyon?

5. What is the bowling ball's velocity when it hits the bottom of the canyon?