

Name: \_\_\_\_\_.

## HOMEWORK - Proj: Straight up

Use problem #3 from your notes to help you with this problem.

3

A cannon shoots a ball at a velocity of 132 m/s. If the cannon shoots straight up, how high is the ball when it reaches the peak?

Picture:

Given:

Substitute, Solve & State the answer: :

Unknown:

Equation:

$$y_f = y_i + v_{yi}t + \frac{1}{2}gt^2 \quad v_{yf} = v_{yi} + gt \quad v_{yf}^2 = v_{yi}^2 + 2g\Delta y$$

\_\_\_/ 10 points