

pg 99 #1 **Proposed Problem** const vel.

free fall

$\Delta y = -0.7m$ $\Delta x = 0.25m$

$v_{iy} = 0 \frac{m}{s}$ $v_x = ?$

$v_{fy} = X$

$a = -9.8 \frac{m}{s^2}$

$\Delta t = 0.66s$

$v_x = \frac{\Delta x}{\Delta t} = \frac{0.25m}{0.32s}$

$\Delta y = v_y t + \frac{1}{2} a t^2$ $t = \sqrt{\frac{2\Delta y}{a}} = \sqrt{\frac{2(-0.7)}{-9.8}} = \sqrt{0.1428} = 0.377s$

$0.25m$

$7m$

- Create Useful description - sketch, graphs, define quantities, define problem
- Physics Approach - list physics concepts that would apply to this problem
- Specific Application of Physics - use the concepts to model mathematically model the problem
- Mathematical Procedures - use the equations to solve the problem

Aug 5-9:52 AM

Physics Problem Solving Sheet

Useful Description

Picture & Given Information:

Question:

Target Quantity:

Jul 26-9:35 PM

Physics Problem Solving Sheet (cont.)

Physics Approach

Physics Concepts and/or Principles:

Specific Application of Physics

Assumptions/ Constraints:

Specific Equations:

Mathematical Procedures

Employ specific equations to solve for target quantity.

Jul 26-9:49 PM