

Proposed Problem

CRP #24

- 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 SheetUseful Description

Picture & Given Information:



$$\Delta t = \sqrt{\frac{2\Delta y}{a}}$$

$$\Delta t = \sqrt{\frac{-2h}{-9.8}}$$

Question:

$$\frac{\Delta x}{\Delta t} = \frac{L}{\sqrt{\frac{2h}{9.8}}} = v_x$$

Target Quantity:

Const. acc	Const vel.
Y	X
$\Delta y = h$	$\Delta x = L$
$v_{iy} = 0 \frac{m}{s}$	$v_x =$
$v_{fy} =$	
$a = -9.8 \frac{m}{s^2}$	
$\Delta t =$	

Jul 26-9:35 PM

Physics Problem Solving Sheet (cont.)Physics Approach

Physics Concepts and/or Principles:

*see last slide*Specific Application of Physics

Assumptions/ Constraints:

no air res.

Specific Equations:

$$v_x = \frac{\Delta x}{\sqrt{\frac{2\Delta y}{-9.8 \frac{m}{s^2}}}}$$

Mathematical Procedures

Employ specific equations to solve for target quantity.

Jul 26-9:49 PM