Proposed Problem

1D motion

CRP #1

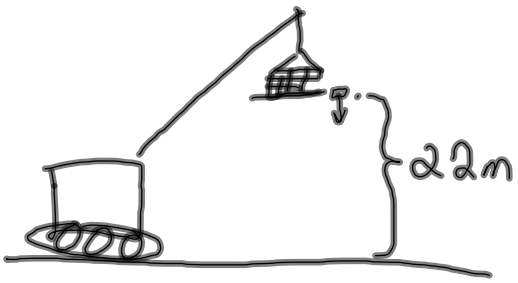
- Create Useful description - sketch, graphs, define quantities, define problem
- Physics Approach - list physics concepts that would apply to this problem
- Specific Application of Physics - use the concepts to model mathematically model the problem
- Mathematical Procedures - use the equations to solve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

Aug 5-9:52 AM

Physics Problem Solving Sheet

Useful Description

Picture & Given Information:



$\Delta y = -22\,m$

$v_i = X$

$\Delta t = 2.5\,s$

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

$v_f = ?$

Question: How fast does it hit the ground.

Target Quantiy: V_f

Jul 26-9:35 PM

Physics Problem Solving Sheet (cont.)

Physics Approach

Physics Concepts and/or Principles:

Const. acc.

Specific Application of Physics

Assumptions/ Constraints:

ignore air res.

Specific Equations:

$\Delta y = V_f \Delta t - \frac{1}{2} a t^2$

Mathematical Procedures

Employ specific equations to solve for target quantity.

$-22m = V_f(2.5s) - \frac{1}{2}\left(-9.8\frac{m}{s^2}\right)(2.5s)^2$

$V_f = -21\frac{m}{s}$

Jul 26-9:49 PM