Proposed Problem

1D motion

CRP #13

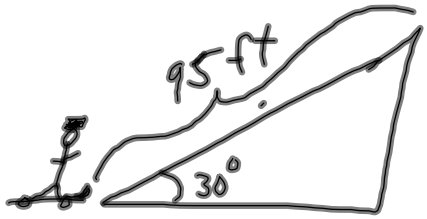
- Create Useful description - sketch, graphs, define quantities, define problem
- Physics Approach - list physics concepts that would apply to this problem
- Specific Application of Physics - use the concepts to model mathematically model the problem
- Mathematical Procedures - use the equations to solve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

Aug 5-9:52 AM

Physics Problem Solving Sheet

Useful Description

Picture & Given Information:



$\Delta x = 95\,ft$

$\Delta t = 6\,s$

$v_i = x$

$v_f = 0\,\frac{ft}{s}$

$a = ?$

170# + 6# - ignore

Question: What is his acceleration on the ramp?

Target Quantiy: a

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:

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

Mathematical Procedures

Employ specific equations to solve for target quantity.

$95\,ft = 0\frac{ft}{s}(6s) - \frac{1}{2}(a)(6s)^2$

$95\,ft = (-18\,s^2)a$

$-5.3\frac{ft}{s^2} = a$

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