## Pythagorean Ramps

Objective: Construct a right triangular ramp whose side lengths are a represent a right triangle as proven by the Pythagorean Theorem. .
DUE DATE: 01 MAY 2015
Grading:

| Category | $31 / 32$ | $28 / 32$ | $24 / 32$ | $20 / 32$ |
| :---: | :--- | :--- | :--- | :--- |
| Accurate | side lengths are a right <br> triangle.; track fits <br> exactly on ramp (1.5" <br> width) | side lengths are less <br> than 1" inaccurate; <br> track fits exactly on <br> ramp (1.5" width). | side lengths are 1"<x <br> $\leq 2 "$ inaccurate; track <br> fits on ramp <br> $(1.5 "<w \leq 2 ")$ | sides more than 2" <br> inaccurate; track fits on <br> ramp (width less than <br> $1.5 " ~ o r ~ g r e a t e r ~ t h a n ~ 2 " ~$ |
| Stable | stands up with no <br> movement. | stands up with no <br> movement | stands up with less <br> than 1" of movement | stands up but with <br> more than 1" of <br> movement. |
| Sturdy-Durable | remains stable during <br> launch test | remains stable during <br> launch test | some movement <br> during launch test | consistent movement <br> during launch test |

## MODEL:

## Tasks:

1. Determine the missing hypotenuse of your right triangular ramp.
2. Construct a ramp, similar to the one in the picture, whose sides complete a right triangle. The vertical distance (height) must always be 30cm!
3. Submit electronically a written description of your construction procedures. This description should be typed, doublespaced, 12 pitch, Times or Times New
 Roman, Arial or Helvetica font. Cover page shall include a picture of your ramp, Filename: nLastNameFirstInit-Pythagorean RampN3CS15.
