

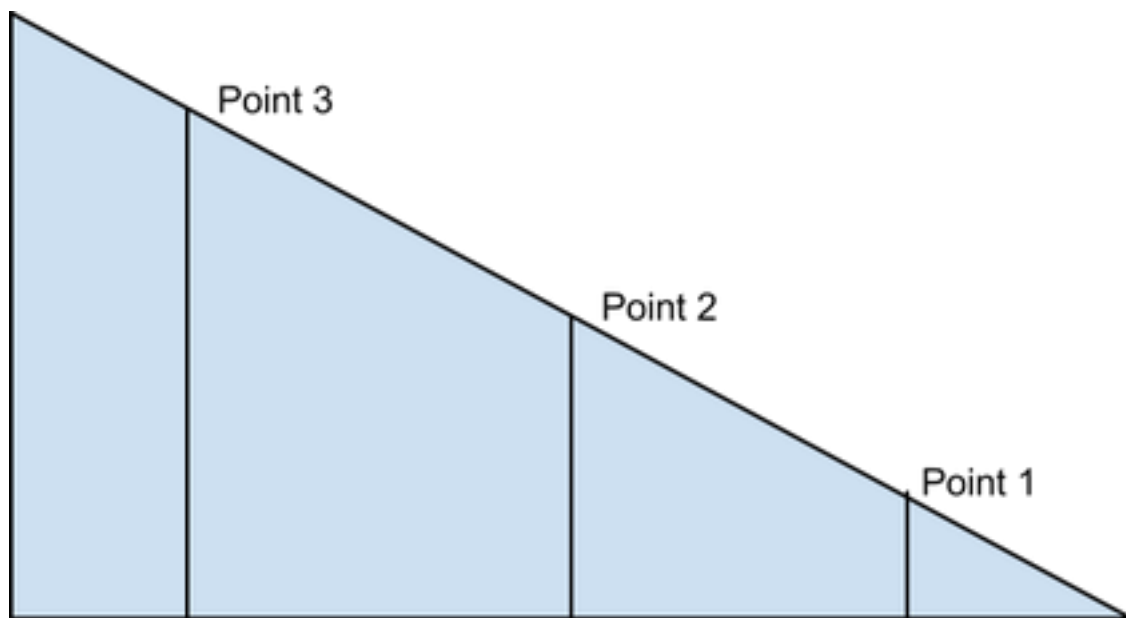
Little Read 2013: *Rules* by Cynthia Lord

| |
|---|
| Title: Ramp Measurement |
| Content Area: Math |
| NC SCOS or Common Core Objective(s): 5.MD.1- Convert among different-sized standard measurement units within a given measurement system (e.g. convert 5cm to 0.05m), and use these conversions in solving a multi-step, real world problems. |
| Rationale/Relationship to Text: In the book, Jason has to use a wheelchair which also requires the use of ramps to get into buildings and other elevated areas. Students can measure ramps around the school or ramps they build out of common classroom materials to convert units of measurement. |

Instructions/Procedures:

Students will find a ramp in their school or build a ramp to measure. Using either a yardstick, or tape measure. Have students pair up to measure the ramp in a unit of choice (feet, yards, inches, centimeters etc.) Once they have recorded their measurement, students will convert the measurement into a different unit of measure. Students will measure the length, width, and height.

Extension: Students will measure the length, width, and height of the ramp at three different points along the incline of the ramp. Use $V=lwh$ to compute the volume of each selected ramp section. Divide the volume of the lowest point on the ramp by the volume of the next highest volume, then divide the second point's volume by the third point's volume. Compare the findings and describe why these outcomes occurred.

**Materials:**

Ruler/Yardstick/ Tape Measurer

References: *RULES* by Cynthia Lord

