

Unit 3 Project: Plan a
Community-Friendly Park

Chapter 1: Slope Review

What formula(s) do you use to solve for slope?

A skateboard ramp has a rise of 5m and a run of 10m, what is the slope of the ramp?

Name: _____



Unit 3 Project: Plan a Community-Friendly Park

Due date: November 22nd, 2018

In this project, your team has been commissioned to make an environment friendly park that is accessible to everyone. However, the area of your park is limited. The city council has also requested to have a playground installed for the younger crowd. The playground must include recreational equipment that has a slope. Whether this is a slide, a jungle gym, or possibly a new recreational equipment never seen before.

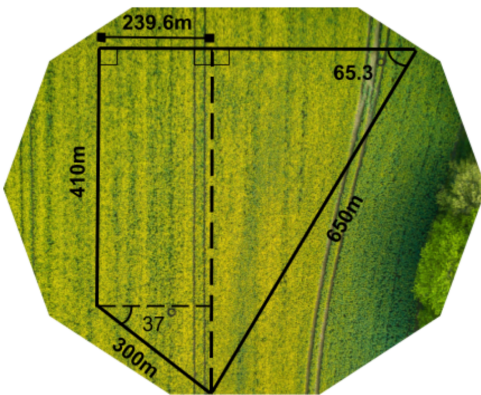
Safety and function are the utmost concern when designing the playground. Some questions to think about when designing the recreational equipment include: "What effects does a steep slope have on the user on the way down?" and "how will they get up?" These considerations make it necessary to have safety standards to which all park builders must be constructed.

PROJECT CHECKLIST:

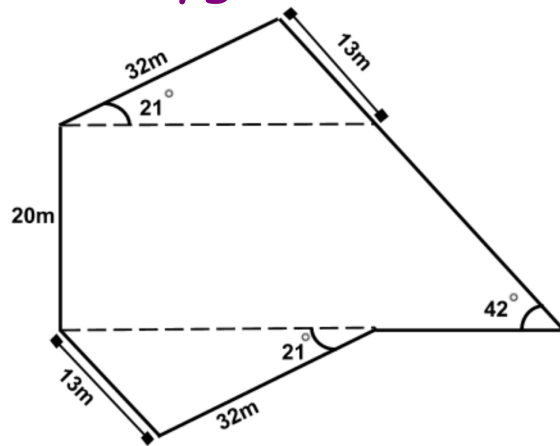
Your final project will include:

- 2-dimensional drawing of the park
 - Label the area
 - Label where the playground is located
- 2-dimensional drawing of your playground
 - Label the area
- 2-dimensional drawing of two recreational equipment pieces that will be added to your park
 - Label their measurements
 - Label the slope of each
- All your calculations for finding the area and slope

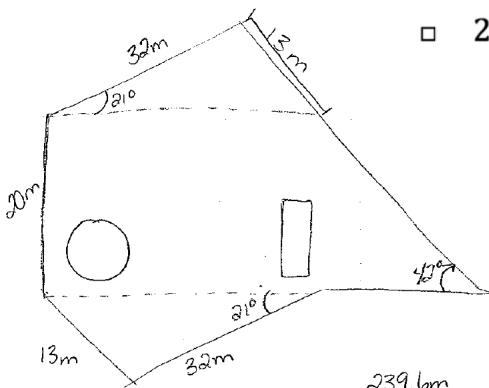
Park



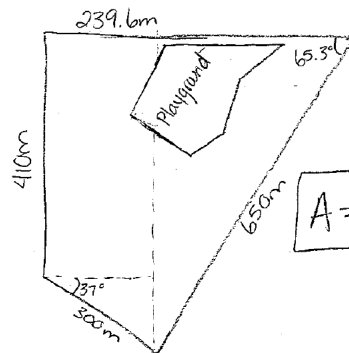
Playground



- 2-dimensional drawing of the park
 - Label the area
 - Label where the playground is located
- 2-dimensional drawing of your playground
 - Label the area



A =



A =

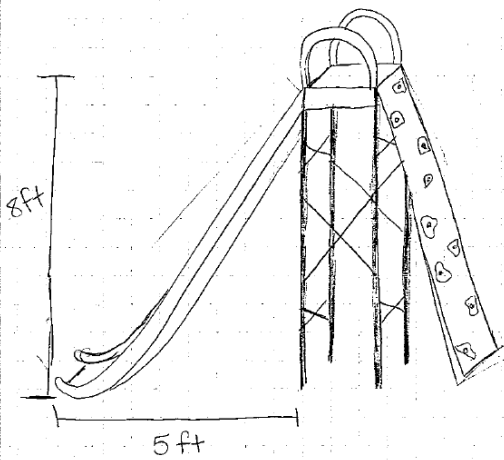
Creating Recreational Equipment: Appropriate measurements

If you were to give me a rough estimate of the length of a meter, how would you show it?

What does a foot look like? How long is 12 inches?

What would be an approximate estimate of the height of a slide?
Length of a slide? Width?

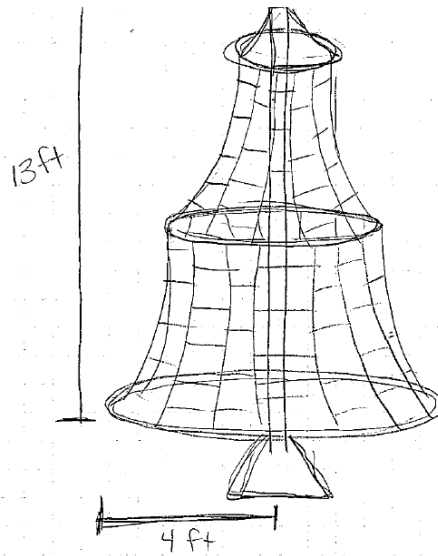
- 2-dimensional drawing of two recreational equipment pieces that will be added to your park
 - Label their measurements
 - Label the slope of each



$$m = \frac{\text{rise}}{\text{run}}$$

$$m = \frac{8}{5}$$

$$m = 1.6$$



$$m = \frac{\text{rise}}{\text{run}}$$

$$m = \frac{13}{4}$$

$$m = 3.25$$

- All your calculations for finding the area and slope

PROVIDE ALL YOUR WORK
FOR CALCULATIONS.

THIS GIVES YOU PART MARKS!!