By the end of this lesson you will be able to _____.

Example 1 – Scale Maps and Drawings

[Fill in the missing information]
The distance between Raleigh, NC and Asheville, NC on the map is _____. The scale for the map

is _____. How many miles is it between these two cities?

What two units are being compared in the problem?

What proportion can be used to solve this problem?
[Show your work using cross products to solve for the missing value]

What is the distance between the cities? Write your answer in a complete sentence.

Example 2 – Indirect Measurement

[Fill in the missing information]
Susie is standing next to a tree that has a shadow measuring _____ long. Susie's shadow is
_____ long and she knows she is 5 feet tall. How tall is the tree?

What two units are being compared in the problem?

What proportion can be used to solve this problem?
[Show your work using cross products to solve for the missing value]

What is the height of the tree? Write your answer in a complete sentence.

Example 3 – Converting Customary Measures

[Fill in the missing information]

Francis claims he weighs _____. Greg says he weighs _____. Which boy weighs more?

What two units are being compared in the problem?

What *two* proportions can be used to solve this problem?
[Show your work using cross products to solve for the missing value in both proportions]

What is the weight of both boys in ounces and in pounds? Write your answers in complete sentences.

Your Turn to Practice

Fill in the missing parts of each question from the video. Use a proportion to solve each problem. Write your answers in complete sentences.

1) Two cities on a map are 5 inches apart. The scale for the map says _____. How many miles apart are the two cities?

2) An 18-foot tree casts a 32-foot shadow. If Leslie is standing next to the tree and she is _____. How long will her shadow be? Round your answer to the nearest tenth.

3) The Guinness Record Books says the longest phone call is _____. How many hours is this record?