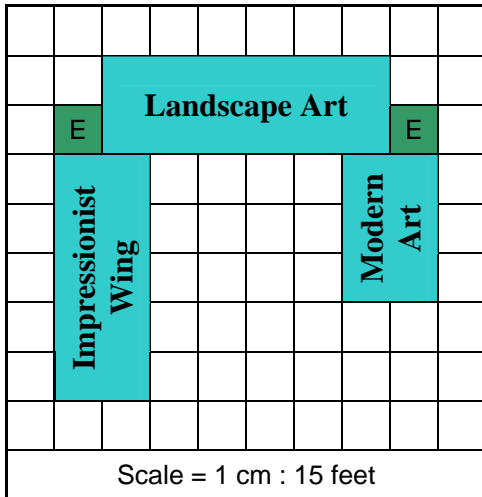


Reteaching Page

8.6 - Scale Drawings and Maps

A drawing of a real object that is proportionally smaller or larger than the real object is called a **scale drawing**. A **scale** is a ratio between two sets of measurements. Usually we need to turn miles into inches or centimeters to make a map. ($\frac{1 \text{ inch}}{125 \text{ miles}}$)



On the left we have a scale drawing of the Museum of Art in our town. Let's use this to learn a little more about scale and scale drawing.

A **scale** is a ratio between two sets of measurements. What two measurements are being compared?

_____ and _____

What proportion represents the scale? $\frac{\text{_____ cm drawing}}{\text{_____ ft real}}$

To figure out how many feet long the Wing of the Impressionists is you must start by measuring the drawing.

How many cm long is the drawing of the Wing of the Impressionists? _____

Solve the proportion $\frac{1 \text{ cm drawing}}{15 \text{ feet object}} = \frac{5 \text{ cm drawing}}{n \text{ ft real}} \rightarrow 15 * 5 = 75 \div 1 = 75 \text{ ft real}$
The Wing is 75 feet long

Now let's find out how wide the Wing is...

How many cm wide is the drawing of the Wing of the Impressionists? _____

Solve the proportion $\frac{1 \text{ cm drawing}}{15 \text{ feet object}} = \frac{2 \text{ cm drawing}}{n \text{ ft real}} \rightarrow 15 * 2 = 30 \div 1 = 30 \text{ ft real}$
The Wing is 30 feet wide

Use the models above to answer the following.

_____ How long is the Modern Art Wing? _____

_____ How long is the Wing of Landscape Art?

_____ The gardener has to trim the grass all the way around the building. How many feet is the total perimeter of the Museum of Art?