



Virtual Learning

The Architect's Scale - Practical Use

April 15, 2020



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Lesson: April 15, 2020

Objective/Learning Target:

Students will practice using an architect's scale on architectural plans



Bell Ringer:

Sometimes there isn't a proper architect's scale nearby when needed. Not to worry, a regular ruler can be used in a pinch. Discuss in your notebooks the relationship between an architect's scale and a standard ruler. For how many different architectural scales can the standard ruler be used?



Let's get started:

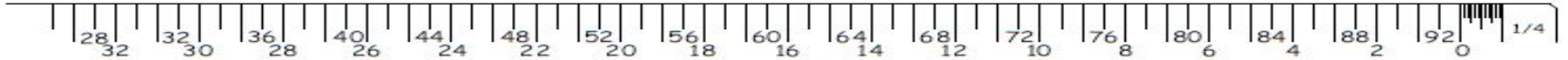
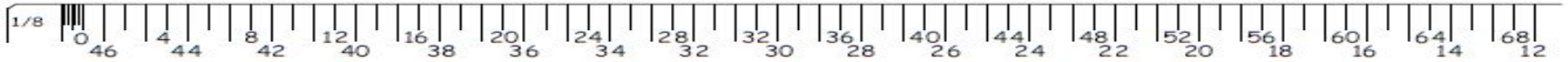
An architect's scale is a tool that allows designers to create large scale projects such as buildings and bridges at a reduced size. A typical scale is triangular in shape and contain as many as 12 different scales on it.

Review this video on how to read the architect's scale from Bob:

<https://www.youtube.com/watch?v=PrbjWgyZIFc>

Practice:

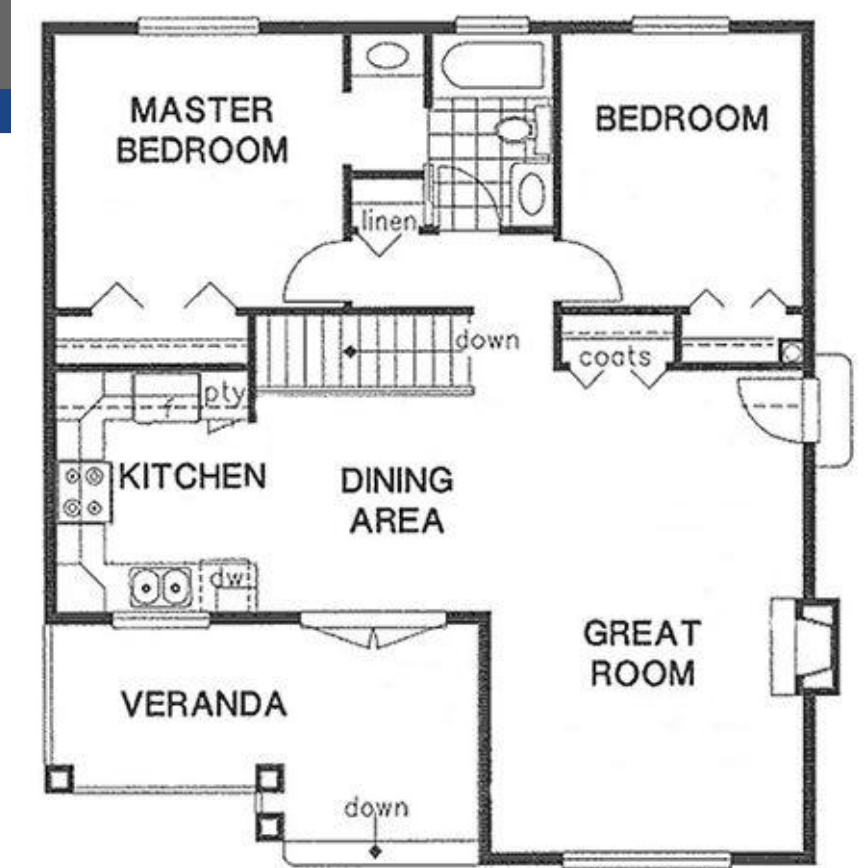
Print this page at 100% scale. Use your printed scales to measure the lines using the proper scale (if you do not have an architect's scale handy).



Practice:

Using the plan to the right, and the printed scales, complete the following tasks:

- Determine the appropriate scale for the drawing using the printed scales.
- Calculate the approximate square footage of the home.
- Record the interior dimensions of the great room, each bedroom, and the combined kitchen.
- List the overall dimensions of the house (longest dimension in each direction)



Check your work:

Answers** for measurements:

1. The most appropriate scale for the plan represented on the previous page is $\frac{1}{8}''=1'-0''$
2. Square footage is approximately 940 sf
3. Room dimensions are approximately:
 - a. Great Room 13' x 20'
 - b. Master 12' x 11'-4"
 - c. Bedroom 10' x 11'-4"
 - d. Kitchen/Dining 18' x 9'
4. Overall dimensions of the house are 35'x32'

Common Mistakes:

- Make sure you are reading from the correct end. Depending on the scale you are using you could either read from right to left or left to right.
- Make sure you are using the correct numbers on the scale.
- The larger the scale the more precise your measurements need to be (i.e. $\frac{1}{8}''$ scale measures to the nearest 2" and 1" scale measures to the nearest $\frac{1}{4}''$).

**Due to the nature of printer discrepancies and interpretations of the printed scales, answers, answers are approximate.



Additional Resources:

How to read the architect's scale:

<https://akloc.files.wordpress.com/2013/09/architectural-scale.pdf>

https://www.youtube.com/watch?v=aytX_QAMzbnk

<https://www.youtube.com/watch?v=fQY7fUmtjPw>