

**SETON**

EDUCATION PARTNERS

IMAGINE MATH LESSON NOTES SHEETName Mason GibsonDate 9/30Lesson Proportions in scale drawings

	① Pre-Quiz	② Warm Up	③ Guided Learning	④ Problem-Solving Process	⑤ Practice	⑥ Post-Quiz	⑦ PASSED / FAILED this lesson.
Record your score, ✓, or none	3/8	✓	✓	✓	✓	8/8	✓

- If you passed a Pre-Quiz, you showed that you understand that lesson...no need to fill out a lesson tracker!
- This page is mainly for recording the important concepts of each lesson. Use the back side of this paper for your practice and work.

Guided Learning / Problem Solving

include...

Use this section to record the important ideas of this lesson. You might

explanations

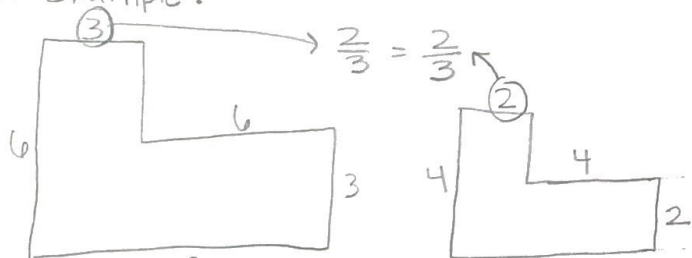
Vocabulary

Step-by-step instructions

Examples with good

1. Scale factor: tells how to change the lengths of original + scale drawings

2. Example:



The ratios should always be equal!

* $\frac{3}{2}$ as tall,
* $\frac{3}{2}$ as wide

3. Scale factor is based on Standard length, not area4. $\frac{1}{6}$ scale drawing, a part is 3 in. How long will the actual part be?Scale \rightarrow Actual = Larger

$$3 \div \frac{1}{6} = \quad \text{or} \quad \frac{3}{1} \cdot \frac{6}{1} = 18$$

* The part would be 18 inches

Post-Quiz

Use this space to show your work/thinking on problems from the post-quiz

1.) $\frac{3}{10}$ scale / 60 cm

$$\frac{3}{10} \cdot \frac{60}{1} = \frac{180}{10} = 18 \text{ cm}$$

2.) $\frac{1}{2}$ scale

$$36 \cdot \frac{1}{2} = 18 \text{ cm}$$

$$28 \cdot \frac{1}{2} = 14 \text{ cm}$$

$$A = 18 \cdot 14 = 252 \text{ cm}$$

3.) $\frac{1}{4}$ scale

$$48 \cdot \frac{1}{4} = 12$$

$$20 \cdot \frac{1}{4} = 5$$