

Math 9A LG 13

SCALE FACTORS AND SIMILARITY



INTRODUCTION:

Did you ever build a model of something? ... Check out pages 126 & 127.



LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:

- 1) draw and interpret scale diagrams of 2-D shapes.
- 2) demonstrate an understanding of similarity of polygons.



EVALUATION:

You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 9A Marks Record Sheet to determine the assessment.



RESOURCES NEEDED:



Math Links 9 Text



THSS Math 9A Learning Guides and Math 9 Journal Entries Package



Math Links 9 Practice and Homework Book



Ruler



Protractor



Graph Paper



Tracing paper

LEARNING ACTIVITIES:



Expectation #1: Draw and interpret scale diagrams of 2-D shapes.



1. In the Math Links 9 text, work through Example 1 on pages 131-132. Now complete #5 on page 136.
2. In the Math Links 9 text, work through Example 2 on pages 133-134. Now complete #6, 7 on pages 136.



3. Read Key Ideas on page 135. In your math journal, complete the journal entry for LG13 Expectation 1a.



4. In the Math Links 9 text, complete the *Explore the Accuracy of a Diagram* activity questions #1 on page 139.
5. In the Math Links 9 text, work through Example 1 on page 140. Now complete #4, 7 on page 143.
6. In the Math Links 9 text, work through Example 2 on page 141. Now complete #8, 10, 12 on page 143.



7. Read Key Ideas on page 143. In your math journal, complete the journal entry for LG13 Expectation 1b.



Expectation #2: Demonstrate an understanding of similarity of polygons.



1. In the Math Links 9 text, complete *Explore How to Identify Similar Triangles* activity on page 146.
2. In the Math Links 9 text, work through Example 1 on page 147. Now complete #4, 7 on pages 150-151.
3. In the Math Links 9 text, work through Example 2 on pages 148-149. Now complete #9 on page 151.



4. Read Key Ideas on page 150. In your math journal, complete the journal entry for LG13 Expectation 2a.



5. In the Math Links 9 text, complete *Explore How to Identify Similar Polygons* activity on page 154.
6. In the Math Links 9 text, work through Example 1 on page 155. Now complete #3 on page 157.
7. In the Math Links 9 text, work through Example 2 on pages 156. Now complete #5 on page 157.



8. Read Key Ideas on page 156. In your math journal, complete the journal entry for LG13 Expectation 2b.

REVIEW AND CHALLENGE



1. In the Math Links 9 text, complete Chapter 4 Review pages 160-161 #1-4, 5, 10, 12, 14, 18.