

Learning Targets

Similarity

Lesson 1: Scale Drawings

- I can dilate a figure given a scale factor and center.

Lesson 2: Scale of the Solar System

- I can calculate the lengths of parts of a scaled drawing.

Lesson 3: Measuring Dilations

- I know that when figures are dilated by a scale factor of k , all lengths in the figure are multiplied by k .

Lesson 4: Dilating Lines and Angles

- I can explain what happens to lines and angles in a dilation.

Lesson 5: Splitting Triangle Sides with Dilation, Part 1

- I can explain why the segment connecting the midpoints of two sides of a triangle is parallel to the third side and half the length of the third side.

Lesson 6: Connecting Similarity and Transformations

- I can write similarity statements.
- I know the definition of similarity.

Lesson 7: Reasoning about Similarity with Transformations

- I know the relationships between corresponding sides and angles in similar triangles.

Lesson 8: Are They All Similar?

- I can critique proofs that use similarity.
- I can write proofs using the definition of similarity.

Lesson 9: Conditions for Triangle Similarity

- I can explain why the Angle-Angle Triangle Similarity Theorem works.

Lesson 10: Other Conditions for Triangle Similarity

- I can explain why the Side-Angle-Side and Side-Side-Side Triangle Similarity Theorems work.

Lesson 11: Splitting Triangle Sides with Dilation, Part 2

- I can explain why a segment parallel to one side of a triangle divides the other sides proportionally.

Lesson 12: Practice With Proportional Relationships

- I can find scale factors and use them to solve problems.

Lesson 13: Using the Pythagorean Theorem and Similarity

- I can find similar triangles formed by the altitude to the hypotenuse in a right triangle.

Lesson 14: Proving the Pythagorean Theorem

- I can prove the Pythagorean Theorem.

Lesson 15: Finding All the Unknown Values in Triangles

- I can solve problems involving similar right triangles.

Lesson 16: Bank Shot

- I can solve and interpret problems involving similar right triangles.