

## Geometry Fourth Nine Weeks

### Measurement

**9 D3.** Use the ratio of lengths in similar two-dimensional figures or three-dimensional objects to calculate the ratio of their areas or volumes respectively.

**9 D4.** Use scale drawings and right triangle trigonometry to solve problems that include unknown distances and angle measures.

### Geometry and Spatial Sense

**10 H3.** Make, test and establish the validity of conjectures about geometric properties and relationships using Counterexample, inductive and deductive reasoning, and paragraph or two-column proof, including:

- a. prove the Pythagorean Theorem;
- d. test a conjecture using basic constructions made with a compass and straightedge or technology.

**10 E4.** Construct right triangles, equilateral triangles, parallelograms, trapezoids, rectangles, rhombuses, squares and kites, using compass and straightedge or dynamic geometry software.

**10 A6.** Identify the reflection and rotation symmetries of two- and three-dimensional figures.

### Data Analysis and Probability

**10 J7.** Model problems dealing with uncertainty with area models (geometric probability).