Geometry Overview

Numerals in parentheses designate individual content standards that are eligible for assessment in whole or in part. Underlined numerals (e.g., 1) indicate standards eligible for assessment on two or more end-of-course assessments. For more information, see Tables 1 and 2. Course emphases are indicated by: ■ Major Content; ▣ Supporting Content; ○ Additional Content. Not all CCSSM content standards in a listed domain or cluster are assessed.

Congruence (G-CO)

- ▣ Experiment with transformations in the plane (1, 2, 3, 4, 5)
- ■ Understand congruence in terms of rigid motions (6, 7, 8)
- ■ Prove geometric theorems (9, 10, 11)
- ▣ Make geometric constructions (12, 13)

Similarity, Right Triangles, and Trigonometry (G-SRT)

- ■ Understand similarity in terms of similarity transformations (1, 2, 3)
- ■ Prove theorems using similarity (4, 5)
- ■ Define trigonometric ratios and solve problems involving right triangles (6, 7, 8)

Circles (G-C)

- ○ Understand and apply theorems about circles (1, 2, 3)
- ○ Find arc lengths and areas of sectors of circles (5)

Expressing Geometric Properties with Equations (G-GPE)

- ○ Translate between the geometric description and the equation of a conic section (1)
- ■ Use coordinates to prove simple geometric theorems algebraically (4, 5, 6, 7)

Geometric measurement and dimension (G-GMD)

- ○ Explain volume formulas and use them to solve problems (1, 3)
- ○ Visualize relationships between two-dimensional and three-dimensional objects (4)

Modeling with Geometry (G-MG)

- ■ Apply geometric concepts in modeling situations (1, 2, 3)

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.