



# Arizona Mathematics Standards

## 2016 Content Emphasis Geometry Course Content

Course content indicated by: ● major content; ▲ supporting content.

### Quantity (N-Q)

- ▲ Reason quantitatively and use units to solve problems.

### Congruence (G-CO)

- Experiment with transformations in the plane.
- Understand congruence in terms of rigid motions.
- Prove geometric constructions.
- ▲ Make geometric constructions.

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

- Understand similarity in terms of similarity transformations.
- Prove theorems using similarity.
- Define trigonometric ratios and solve problems involving right triangles.

### Circles (G-C)

- ▲ Understand and apply theorems about circles.
- ▲ Find arc lengths and areas of sectors of circles.

### Expressing Geometric Properties with Equations (G-GPE)

- ▲ Translate between the geometric description and the equation of a conic section.
- Use coordinates to prove simple geometric theorems algebraically.

### Geometric Measurement and Dimensions (G-GMD)

- Explain volume formulas and use them to solve problems.
- ▲ Visualize relationships between two-dimensional and three-dimensional objects.

### Modeling with Geometry (G-MG)

- ▲ Apply geometric concepts in modeling situations.