## AMSCO Geometry alignment to Pennsylvania Common Core Standards

| PA Common Core Standards | AMSCO Geo Lesson(s) |
|---|---|
| CC.2.3.HS.A.1 Use geometric figures and their properties to represent transformations in the plane. | 1.3, 1.4, 1.5, 1.6, 1.7, 2.2, 2.4, 11.3, 11.4 |
| CC.2.3.HS.A.2 Apply rigid transformations to determine and explain congruence. | 1.3, 1.4, 1.5, 1.6, 1.7, 5.4 |
| CC.2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. | 3.4, 4.1, 4.2, 4.3, 4.5, 5.1, 5.3, 5.4, 6.1, 6.2, 6.4, 6.6, 7.1, 7.2, 7.3, 7.4, 9.1, 9.2, 9.3 |
| CC.2.3.HS.A.4 Apply the concept of congruence to create geometric constructions. | 1.1, 4.3, 5.1, 6.2, 6.3, 8.1, 8.3, 9.6 |
| CC.2.3.HS.A.5 Create justifications based on transformations to establish similarity of plane figures. | 2.1, 2.2, 2.3, 2.4, 7.1 |
| CC.2.3.HS.A.6 Verify and apply theorems involving similarity as they relate to plane figures. | 2.2, 2.3, 5.2, 5.3, 5.4, 6.2, 7.1, 7.2, 7.4 |
| CC.2.3.HS.A.7 Apply trigonometric ratios to solve problems involving right triangles. | 7.3, 7.5, 7.6 |
| CC.2.3.HS.A.8 Apply geometric theorems to verify properties of circles. | 6.3, 6.5, 8.1, 8.2, 8.3, 8.4, 11.3 |
| CC.2.3.HS.A.9 Extend the concept of similarity to determine arc lengths and areas of sectors of circles. | 8.5 |
| CC.2.3.HS.A.10 Translate between the geometric description and the equation for a conic section. | 11.1, 11.2, 11.3, 11.4 |
| CC.2.3.HS.A.11 Apply coordinate geometry to prove simple geometric theorems algebraically. | 1.2, 4.4, 6.1, 6.3, 6.4, 9.1, 9.5, 9.6 |
| CC.2.3.HS.A.12 Explain volume formulas and use them to solve problems. | 10.3 |
| CC.2.3.HS.A.13 Analyze relationships between two-dimensional and three-dimensional objects. | 10.1, 10.4, 11.1, 11.2 |
| CC.2.3.HS.A.14 Apply geometric concepts to model and solve real world problems. | 9.6, 9.7, 9.8, 10.2, 10.3, 10.5, |
| CC.2.4.HS.B.6 Use the concepts of independence and conditional probability to interpret data. | 12.1, 12.3, 12.4, 12.5 |
| C.2.4.HS.B.7 Apply the rules of probability to compute probabilities of compound events in a uniform probability model. | 12.1, 12.3, 12.4, 12.5 |