

AMSCO Algebra 2 alignment to Pennsylvania Common Core Standards

PA Common Core Standards	AMSCO A2 Lesson(s)
CC.2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers.	2.4, 2.5
CC.2.1.HS.F.7 Apply concepts of complex numbers in polynomial identities and quadratic equations to solve problems.	2.4, 2.5, 2.6, 3.5
CC.2.2.HS.D.1 Interpret the structure of expressions to represent a quantity in terms of its context.	R.5, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.4, 4.1, 4.2, 5.3, 6.2, 7.6
CC.2.2.HS.D.2 Write expressions in equivalent forms to solve problems.	5.1, 5.2, 5.3, 5.4, 6.2, 8.4
CC.2.2.HS.D.3 Extend the knowledge of arithmetic operations and apply to polynomials.	R.5, 3.1, 3.2, 3.3, 3.8
CC.2.2.HS.D.4 Understand the relationship between zeros and factors of polynomials to make generalizations about functions and their graphs.	2.6, 3.3, 3.4, 3.5
CC.2.2.HS.D.5 Use polynomial identities to solve problems.	2.1, 2.2, 2.3, 2.4, 8.5
CC.2.2.HS.D.6 Extend the knowledge of rational functions to rewrite in equivalent forms.	3.2, 4.1, 4.2, 4.3
CC.2.2.HS.D.7 Create and graph equations or inequalities to describe numbers or relationships.	R.1, R.4, 1.3, 2.7, 2.8, 3.8, 4.3, 5.5, 7.5
CC.2.2.HS.D.8 Apply inverse operations to solve equations or formulas for a given variable.	4.3, 5.4
CC.2.2.HS.D.9 Use reasoning to solve equations and justify the solution method.	4.3, 5.4
CC.2.2.HS.D.10 Represent, solve and interpret equations/inequalities and systems of equations/inequalities algebraically and graphically.	R.4, 3.9, 4.4, 7.2
CC.2.2.HS.C.2 Graph and analyze functions and use their properties to make connections between the different representations.	2.4, 2.6, 2.7, 2.8, 3.5, 3.8, 4.4, 5.5, 6.1, 6.2, 7.2, 7.5, 9.5
CC.2.2.HS.C.3 Write functions or sequences that model relationships between two quantities.	1.3, 6.2, 6.3, 8.1, 8.2, 8.3,
CC.2.2.HS.C.4 Interpret the effects transformations have on functions and find the inverses of functions.	R.6, 3.7, 4.4, 5.5, 6.1, 6.4, 7.2, 9.5
CC.2.2.HS.C.5 Construct and compare linear, quadratic and exponential models to solve problems.	7.1, 7.3, 7.4, 7.6, 8.1, 8.3,
CC.2.2.HS.C.7 Apply radian measure of an angle and the unit circle to analyze the trigonometric functions.	9.3, 9.4
CC.2.2.HS.C.8 Choose trigonometric functions to model periodic phenomena and describe the properties of the graphs.	9.5, 9.7
CC.2.2.HS.C.9 Prove the Pythagorean identity and use it to calculate trigonometric ratios.	9.4
CC.2.4.HS.B.1 Summarize, represent, and interpret data on a single count or measurement variable.	10.5
CC.2.4.HS.B.2 Summarize, represent, and interpret data on two categorical and quantitative variables.	2.7, 6.2, 9.7
CC.2.4.HS.B.4 Recognize and evaluate random processes underlying statistical experiments.	10.6, 10.7
CC.2.4.HS.B.5 Make inferences and justify conclusions based on sample surveys, experiments, and observational studies.	10.6, 10.7
CC.2.4.HS.B.7 Apply the rules of probability to compute probabilities of compound events in a uniform probability model.	10.1, 10.2, 10.3, 10.7