West Virginia Alternate Academic Achievement Standards

High School Algebra II

Polynomial Relationships

Interpret the structure of expressions.

1 Identify an algebraic expression involving arithmetic operations to represent a real-world problem. A.M.A2HS.1

2 In real world problem situations, combine mixed numbers (i.e., recipes). Instructional Note: Limit to halves. A.M.A2HS.2

3 Interpret the meaning of the intersection of the two graphs. Instructional Note: Include linear and polynomial functions. A.M.A2HS.3

Modeling with Functions

Create equations that describe numbers or relationships.

4 Create linear equations and inequalities in one variable and use them to solve problems. A.M.A2HS.4

5 Create linear equations in two variables to represent relationships between quantities and graph equations on coordinate axes with labels and scales. A.M.A2HS.5

6 Solve multi-step word problems, represent these problems using formulas with a letter standing for the unknown quantity. Assess the reasonableness of answers. A.M.A2HS.6

Cluster: Interpret functions that arise in applications in terms of a context.

7 Given a linear function represented by a table, determine the rate of change and find missing value. For example: A.M.A2HS.7

8 Given real-world measures, demonstrate an understanding of domains and list possible values of domains. A.M.A2HS.8

Cluster: Analyze functions using different representations.

9 Compare and contrast two functions represented in different tables (e.g., Store A's Discount Table and Store B's Discount Table) to answer questions. A.M.A2HS.9

Cluster: Build a function that models a relationship between two quantities.

10 Given a real-world situation, complete a given table to answer questions. For example: A.M.A2HS.10

Inferences and Conclusions from Data

Summarize, represent, and interpret data on a single count or measurement variable.

11 Test predictions involving real-world events (e.g., experimental probability). A.M.A2HS.11

Understand and evaluate random processes underlying statistical experiments.

12 Approximate the likelihood of an event based on its probability (e.g., given a weather forecast, determine if it is likely to rain) and make appropriate real-world choices. A.M.A2HS.12

13 Revise original predictions if necessary when predicting real-world events. A.M.A2HS.13

Cluster: Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

14 Draw conclusions from a given representation of data in real world situations. A.M.A2HS.14

15 Use data from a survey to make assumptions about a larger population (e.g., from a survey about favorite color given to a small number of students in a school, assume that the results hold for the school). A.M.A2HS.15

16 Use data from a randomized experiment to make real world predictions. A.M.A2HS.16

Cluster: Use probability to evaluate outcomes of decisions.

17 Use probabilities to make fair decisions. A.M.A2HS.17

18 Analyze decisions and outcomes based on probability concepts. A.M.A2HS.18