

# 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](#)
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### 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](#)
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### 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](#)
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### 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](#)