



Topics Addressed in Preparation Resources for MWSU Mathematics Placement Exam



Topic 1: Integers and Rational Numbers

- A. Adding Integers
- B. Subtracting Integers
- C. Multiplying and Dividing Integers
- D. Order of operations with integers
- E. Simplifying fractions
- F. Adding and Subtracting fractions
- G. Multiplying fractions
- H. Dividing fractions
- I. Order of operations with fractions
- J. Evaluating expressions at specified values

Topic 2: Irrational Numbers

- A. Estimating square roots
- B. Simplifying square roots
- C. Writing square roots in equivalent forms
- D. Simplifying square roots involving variables

Topic 3: Algebraic Expressions

- A. Properties of exponents
- B. Adding and subtracting polynomials
- C. Multiplying polynomials
- D. Dividing by a monomial

Topic 4: Linear Equations in One Variable

- A. Solving linear equations
- B. Solving linear equations (Advanced)
- C. Solving absolute value equations
- D. Solving absolute value equations (Advanced)

Topic 5: Linear Inequalities in One Variable

- A. Inequalities and Interval Notation
- B. Solving Linear Inequalities
- C. Solving Linear Inequalities (Advanced)

Topic 6: Evaluating Functions

- A. Evaluating linear functions
- B. Evaluating linear functions involving fractions
- C. Evaluating exponential expressions
- D. Evaluating exponential expressions (Advanced)

Topic 7: Graphing in the Coordinate Plane

- A. Linear equations in two variables
- B. Determining the slope
- C. Horizontal and vertical lines
- D. Intercepts
- E. Exponential equations
- F. Interpreting graphs

Topic 8: Logarithms

- A. Converting from logarithmic to exponential form
- B. Converting from exponential to logarithmic form
- C. Evaluating logarithms
- D. Simplifying logarithmic and exponential expressions

Topic 9: Exponential and Logarithmic Equations

- A. Solving exponential equations
- B. Solving exponential equations (Advanced)
- C. Solving logarithmic equations
- D. Solving logarithmic equations (Advanced)

Topic 10: Linear Equations in Two Variables

- A. Linear equations in two variables
- B. Finding the equation of a line
- C. Horizontal and vertical lines
- D. Determining characteristics of a line

Topic 11: Factoring

- A. Greatest common factor
- B. Factoring trinomials (Part 1)
- C. Factoring trinomials (Part 2)
- D. The difference of two squares
- E. Factoring completely

Topic 12: Quadratic Equations in One Variable

- A. Solving quadratic equations
- B. Solving quadratic equations by factoring
- C. Solving equations by factoring (Advanced)