

Project WILD and Aquatic WILD

Correlations to Indiana Math Standards, grades 9-12



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July 2009

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Algebra 1

Standard 1

Operations With Real Numbers

Students simplify and compare expressions. They use rational exponents and simply square roots.

Standard 2

Students solve linear equations and inequalities in one variable. They solve word problems that involve linear equations, inequalities, or formulas.

A1.2.2 Solve equations and formulas for a specified variable.

PW Turkey Trouble p. 367

Standard 3

Students sketch and interpret graphs representing given situations. They understand the concept of a function and analyze the graphs of functions

A1.3.1 Sketch a reasonable graph for a given relationship. (Core Standard)

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A1.3.2 Interpret a graph representing a given situation. (Core Standard)

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Standard 4

Graphing Linear Equations and Inequalities

Students graph linear equations and inequalities in two variables. They write equations of lines and find and use the slope and y-intercept of lines. They use linear equations to model real data.

A1.4.1 Graph a linear equation. (Core Standard)

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A1.4.4 Write the equation of a line given appropriate information. (Core Standard)

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A1.4.5 Write the equation of a line that models a data set and use the equation (or the graph of the equation) to make predictions. Describe the slope of the line in terms of the data, recognizing that the slope is the rate of change. (Core Standard)

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Standard 9

Mathematical Reasoning and Problem Solving

Students use a variety of strategies to solve problems. Students develop and evaluate mathematical arguments and proofs.

A1.9.1 Use a variety of problem solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.

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 I'm Thirsty p. 134
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Algebra 2

Standard 2

Linear and Absolute Value Equations and Inequalities

Students solve systems of linear equations and inequalities and use them to solve word problems. They model data with linear equations.

A2.2.3 Use systems of linear equations and inequalities to solve word problems. (Core Standard)

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Standard 7

Logarithmic and Exponential Functions

Students graph exponential functions and relate them to logarithms. They solve logarithmic and exponential equations and inequalities. They solve word problems using exponential functions.

A2.7.1 Graph exponential functions

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A2.7.8 Solve word problems involving applications of exponential functions to growth and decay. (Core Standard)

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Standard 10

Mathematical Reasoning and Problem Solving

Students use a variety of strategies to solve problems. Students develop and evaluate mathematical arguments and proofs.

A2.10.1 Use a variety of problem-solving strategies, such as drawing a diagram, guess-and-check, solving a simpler problem, writing an equation, and working backwards.

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Geometry

Standard 1

Points, Lines, Angles, and Planes

Students find lengths and midpoints of lines. They describe and use parallel and perpendicular lines. They find slopes and equations of lines.

G.1.2 Construct congruent segments and angles, angle bisectors, and parallel and perpendicular lines using a straight edge and compass, explaining and justifying the process used.

PW Spider Web Geometry p. 34

Standard 2

Polygons

Students identify and describe polygons, and measure interior and exterior angles. They use congruence, similarity, symmetry, tessellations, and transformations. They find measures of sides, perimeters, and areas.

G.2.5 Find and use measures of sides, perimeters, and areas of polygons, and relate these measures to each other using formulas. (Core Standard)

PW Spider Web Geometry p. 34

Standard 8

Mathematical Reasoning and Problem Solving

Students use a variety of strategies to solve problems. Students develop and evaluate mathematical arguments and proofs.

G.8.1 Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.

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G.8.8 Write geometric proofs, including proofs by contradiction and proofs involving coordinate geometry. Use and compare a variety of ways to present deductive proofs, such as flow charts, paragraphs, and two-column and indirect proofs. (Core Standard)

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G.8.9 Perform basic constructions, describing and justifying the procedures used. Distinguish between constructing and drawing geometric figures.

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Pre-Calculus

Standard 9

Mathematical Reasoning and Problem Solving

Students use a variety of strategies to solve problems. Students develop and evaluate mathematical arguments and proofs.

PC.9.1 Use a variety of strategies to problem-solving strategies, such as drawing a diagram, guess-and-check, solving a simpler problem, examining simpler problems, and working backwards.

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