

INNOVATION IN EDUCATION

Math in Focus

December 2010



DESTINATION MATH



HOUGHTON MIFFLIN
LEARNING TECHNOLOGY

Destination Math
Aligned to
Math in Focus

Math in Focus	Destination Math
Grade 5	
Number and Operations	
Sets and Numbers	
Explore negative numbers in context.	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers
Number Representation	
Understand place value concepts through millions	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million
Count	
Count by hundred thousands and millions.	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million
Compare and Order	
Compare and order whole numbers to 10,000,000.	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers
Place Value	
Express numbers to 10,000,000 in various forms.	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million
Fraction Concepts	
Convert fractions to decimals.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Relate fractions and division expressions.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions
Decimal Concepts	
Model decimals using thousandths.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths
Understand place value concepts through thousandths.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths
Convert decimals to fractions.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Ratio, Proportion, and Percent	

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Use ratios to solve problems	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Find equivalent ratios.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Solve problems with percent.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Convert fractions to percents.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Whole Number Computation: Addition and Subtraction Real-World Problems	
Solve multi-digit addition and subtraction problems by using a bar model.	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers
Whole Number Computation: Multiplication and Division Concepts	
Use the \times , \div , and $=$ symbols to represent multiplication and division situations	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors
Whole Number Computation: Multiplication and Division Algorithms	
Multiply multi-digit numbers.	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers
Find quotients involving multi-digit dividends.	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers
Whole Number Computation: Multiplication and Division Real-World Problems	
Solve multiplication and division problems	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors

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Select the most useful form of the quotient and interpret the remainder.	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors
Fraction Computation	
Add and subtract unlike fraction and mixed numbers.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators
Multiply proper fractions, improper fractions, mixed numbers and whole numbers.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Multiplication and Division Session: Finding Products
Divide fractions by whole numbers.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders
Solve word problems with addition, subtraction, multiplication, and division of fractions.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators Module: Fractions Unit: Multiplication and Division Session: Finding Products Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders
Decimal Computation	
Add and subtract decimals.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals
Multiply and divide decimals by whole numbers.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
Solve problems with multiplication and division of decimals.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
Estimation and Mental Math	

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<p>Use estimation and mental math to estimate sums, differences, products and quotients.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
<p>Estimate sums and differences with fractions and decimals.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals
<p>Estimate products and quotients with decimals.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
<p>Algebra Number Sentences and Equations</p>	

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<p>Write and solve number sentences and equations for one- and two step real-world problems</p>	<p>Course III:</p> <ul style="list-style-type: none">• Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers• Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division• Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors• Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators• Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators• Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators• Module: Fractions Unit: Multiplication and Division Session: Finding Products• Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders• Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals• Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals• Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals• Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
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Write and solve equations.	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers
Equality and Inequality	
Understand equality and inequality.	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers • Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions • Module: Decimals Unit: Introduction Session: Ordering and Rounding
Geometry	
Lines and Angles	
Work with angles on a straight line.	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles
Work with angles at a point.	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles
Two- Dimensional Shapes	
Apply the properties of right, isosceles, and equilateral triangles.	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Geometry Unit: Measurement Session: Triangles

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Apply the sum of the angle measures of a triangle.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Triangles
Apply the properties of a parallelogram, rhombus, and trapezoid.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids
Find the area of a triangle.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids
Coordinate Geometry	
Plot points on a coordinate grid.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane
Measurement	
Angles	
Apply the idea that the sum of angles on a straight line is 180° .	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles
Area	
Find the area of triangles.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids
Probability	
Outcomes	
Determine experimental probability of an outcome.	Course III: <ul style="list-style-type: none"> Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
Expressing Probability	
Compare the results of an experiment with theoretical probability.	Course III: <ul style="list-style-type: none"> Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
Find all possible combinations by listing, making a tree diagram, and multiplying.	Course III: <ul style="list-style-type: none"> Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
Problem Solving	
Build Skills Through Problem Solving	

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<p>Build skills in multiplication; division; fraction concepts, decimals, ratios, and percents; data analysis, and measurement through problem solving.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers • Module: Geometry Unit: Measurement Session: Rectangles and Squares • Module: Geometry Unit: Measurement Session: Triangles • Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data
<p>Solve Real-World Problems</p>	

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<p>Solve real-world problems involving multiplication; division; concepts with fractions, decimals, ratios, and percents; data analysis, and measurement.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers • Module: Geometry Unit: Measurement Session: Rectangles and Squares • Module: Geometry Unit: Measurement Session: Triangles • Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data
<p>Use Appropriate Strategies and Thinking Skills to Solve Problems</p>	

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<p>Use appropriate strategies to solve real-world problems.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers • Module: Geometry Unit: Measurement Session: Rectangles and Squares • Module: Geometry Unit: Measurement Session: Triangles • Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data
Identify, Demonstrate and Explain Mathematical Proof	
<p>Explain the relationships among area formulas of different polygons.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids
<p>Compare the results of an experiment to validate the use of theoretical probability.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
Use a Variety of Reasoning Skills	
<p>Explore the relationship among lists, tree diagrams, and multiplication to calculate combinations.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance

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Use properties of multiplication (including the distributive property) in estimation and mental math.	Course III: <ul style="list-style-type: none"> Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers
Connections	
Recognize Connections in Mathematical Ideas	
Relate fractions and division.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions
Understand the connection among fractions, decimals, ratios, and percents as ways to represent parts of a whole.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Examine the relationships between three-dimensional figures and the two-dimensional figures that form them.	
Relate fractions and division.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Proper and Improper Fractions Session: Proper Fractions Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions
Understand How Concepts Build on One Another	
Explain the relationships among area formulas of different polygons.	Course III: <ul style="list-style-type: none"> Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids
Connect equivalent fractions, decimals, and percents.	Course III: <ul style="list-style-type: none"> Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Solve Real-World Problems in Contexts Outside of Mathematics	

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<p>Solve real-world problems involving multiplication; division; fraction, decimal, ratio, and percent concepts; data analysis, and measurement.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division • Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors • Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators • Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators • Module: Fractions Unit: Multiplication and Division Session: Finding Products • Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders • Module: Decimals Unit: Addition and Subtraction Session: Adding Decimals • Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals • Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals • Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers • Module: Geometry Unit: Measurement Session: Rectangles and Squares • Module: Geometry Unit: Measurement Session: Triangles • Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data
<p>Compare experimental results and theoretical probability.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
<p>Representation</p>	
<p>Use Representations to Model, Organize, and Record</p>	
<p>Explore negative numbers in context.</p>	<p>Course III:</p> <ul style="list-style-type: none"> • Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers

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Express numbers to 10,000,000 in various forms.	Course III: <ul style="list-style-type: none"> Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million
Find equivalent ratios.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Explore the use of letters as variables in expressions and inequalities.	
Convert fractions and decimals to percents.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Represent combinations with lists, tree diagrams, and multiplication.	Course III: <ul style="list-style-type: none"> Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance
Select and Apply Representations to Model Problems	
Translate between fractions and percents.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents
Select the most useful form of the quotient.	Course III: <ul style="list-style-type: none"> Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents