Students taking the class for normal credit will find their assignments listed first in each
section. Honors assignments are *italicized*. Review assignments apply to normal and honors credit classes.
With the exception of word problems, write the original questions, show all work, and circle your solution on a sheet of paper.

1 Integers and Rational Numbers

1.1 Relate Integers and Their Opposites

EQ: How are opposite numbers related?

Obj: Understand how integers and their opposites are related.

p. 12 4-14, 17-18 *p. 12 4-14, 16-18, Enrichment Handout*	*Khan Academy*	*IXL*

1.2 Understand Rational Numbers

EQ: How are rational numbers written in decimal form?

Obj: Identify rational numbers and write them in decimal form.

p. 18 4, 6-8 (show work by using long division), 9, 11-13a, 15, 17, 20, 22 *p. 18 4, 6-8 (show work by using long division), 9, 11-13b, 15-20, 22*	*Khan Academy*	*IXL*

1.1-1.2 Review

p. 76 1-2 and 1-3 (Regular and Honors)

1.3 Add Integers

EQ: How are opposite integers related to absolute value?

Obj: Add positive and negative integers and model integer addition in real-life applications.

p. 25 4-12, 14-17 *p. 25 4-12, 14-17, Enrichment Handout*	*Khan Academy*	*IXL*

1.4 Subtract Integers

EQ: How is subtracting a number the same as adding it's additive inverse?

Obj: Understand subtraction of integers as adding the additive inverse, $p - q = p + (-q)$.

p. 30 4-6, 8-10a, 11a, 12, 14-15 *p. 30 4-6, 8-10a, 11a, 12, 14-15, Enrichment Handout*	*Khan Academy*	*IXL*

1.5 Add and Subtract Rational Numbers

EQ: How is adding and subtracting integers related to adding and subtracting rational numbers?

Obj: Use properties of operations to add and subtract rational numbers.

Handout then p. 36 4-14 *Handout then p. 36 4-14, 18a*	*Khan Academy*	*IXL*

1.3-1.5 Review

p. 77 1-3 and 1-3, and p. 78 1-3 (Regular and Honors)

1.6 Multiply Integers

EQ: How is the sign of the product determined?

Obj: Multiply positive and negative integers.

p. 44 6-16a, 17a, 18-20b, 23 *p. 44 6-16a, 17a, 18-20b, 21, 23, Enrichment Handout*	*Khan Academy*	*IXL*

1.7 Multiply Rational Numbers

EQ: How is multiplying rational numbers like multiplying integers?

Obj: Find the product of rational numbers.

Handout then p. 50 5-14, 16 *Handout then p. 50 5-14, 16, 18*	*Khan Academy*	*IXL*

1.6-1.7 Review

p. 78 1-3 and p. 79 1-4 (Regular and Honors)

1.8 Divide Integers

EQ: How can you use the properties of multiplying integers to divide integers?

Obj: Understand how to divide integers by applying the rules of multiplying integers.

p. 56 4-6, 11-17, 19-21 *p. 56 4-6, 11-21, Enrichment Handout*	*Khan Academy*	*IXL*

1.9 Divide Rational Numbers

EQ: How is dividing rational numbers similar to dividing integers?

Obj: Understand how the signs of integers in a multiplication sentence relate to the signs in a related division statement.

Handout then p. 62 4-7, 13a and b, 18 *Handout then p. 62 4-7, 13a and b, 18*	*Khan Academy*	*IXL*

1.10 Solve Problems with Rational Numbers

EQ: How can problems involving rational numbers be solved by making sense of their quantities and relationship to each other?

Obj: Decide which operations to use to solve problems.

p. 68 4-12 *p. 68 4-12, 15*	*Khan Academy*	*IXL*

C1 Review

Topic 1 Assessment (Regular and Honors)

2 *Analyze and Use Proportional Relationships*

2.1 Connect Ratios, Rates, and Unit Rates

EQ: How can equivalent ratios and unit rates be used to compare ratios and solve problems?

Obj: Use ratios and rates to describe the relationship between two quantities and find equivalent ratios and use unit rates to solve multi-step problems.

p. 92 4-12, 17 *p. 92 4-14b,15, 17*	*Khan Academy*	IXL

2.2 Determine Unit Rates with Ratios and Fractions

EQ: How is it that a unit rate can be easier to use to solve problems than a ratio of fractions?

Obj: Find unit rates with ratios of fractions and use unit rates to solve multi-step problems.

p. 98 4-6, 9-13, 18 *p. 98 4-6, 9-18*	*Khan Academy*	IXL

2.1-2.2 Review

p. 132 1-2 (Regular and Honors)

2.3 Understand Proportional Relationships: Equivalent Ratios

EQ: How can quantities in a proportional relationship be described by equivalent ratios?

Obj: Determine whether quantities are proportional by testing for equivalent ratios.

p. 104 4-11, 15 *p. 104 4-13, 15*	*Khan Academy*	IXL

2.4 Describe Proportional Relationships: Constant of Proportionality

EQ: How can equations in the form $y = kx$ be used to represent proportional relationships and solve problems?

Obj: Use the constant of variation (proportionality) to write equations that represent proportional relationships and use equations to solve problems involving proportional relationships.

p. 110 4-8, 10-13, 17 *p. 110 4-8, 10-13, 15, 17*	*Khan Academy*	IXL

2.3-2.4 Review

p. 132 1-2 and p. 133 1-2 (Regular and Honors)

2.5 Graph Proportional Relationships

EQ: What are the basic principles for the graph of a direct variation equation?

Obj: Use a graph to recognize proportionality, identify the constant of variation from a graph, and interpret a point on a graph of a direct variation.

p. 122 4-12, 14-15 *p. 122 4-15*	*Khan Academy*	IXL

2.6 Apply Proportional Reasoning to Solve Problems

EQ: How can you use what you know about proportional relationships to solve problems?

Obj: Explain whether a situation represents a proportional relationship and use representations to find entry points into problems.

p. 128 4-7, 9-10, 13	*Khan Academy*	*IXL*
p. 128 4-7, 9-10, 12-13		

C2 Review

Topic 2 Assessment (Regular and Honors)

3 *Analyze and Solve Percent Problems*

3.1 Analyze Percents of Numbers

EQ: How can equivalent ratios be used to find the percent of a number?

Obj: Understand that equivalent rates can be used to find percents.

p. Handout then p. 146 4, 10-12, 21 *Handout then p. 146 4, 10-14, 21*	Khan Academy	IXL

3.2 Connect Percent and Proportion

EQ: How are equivalent ratios and percents related?

Obj: Construct a proportion and use a percent proportion to find an unknown part, whole, or percent.

Handout then p. 152 4-5, 7-10 *Handout then p. 152 4-5, 7-10, 14-15*	Khan Academy	IXL

3.1-3.2 Review

p. 186 1-3 and 1-3 (Regular and Honors)

3.3 Represent and Use the Percent Equation

EQ: How can proportional reasoning be used to develop the percent equation, which in turn can be used to find the percent, part, or whole?

Obj: Understand the relationship between proportional reasoning and percent and interpret the results of a percent equation in a real-life scenario.

p. 158 4-5, 7-8, 13-16, 19 *p. 158 4-5, 7-8, 13-17a, 19*	Khan Academy	IXL

3.4 Solve Percent Change and Percent Error Problems

EQ: How can the percent equation be used in different ways?

Obj: Solve real-world problems involving percent change and percent error and understand the percent equation and the different ways it can be used.

p. 166 4, 6-11, 13 *p. 166 4, 6-11, 13*	Khan Academy	IXL

3.3-3.4 Review

p. 187 1-2 and 1-2 (Regular and Honors)

3.5 Solve Markup and Markdown Problems

EQ: How are markups and markdowns related to percent increases and decreases?

Obj: Understand and calculate markups and markdowns and relate percent change to percent markup and percent markdown.

p. 176 4, 6-8, 10a, 11-12, 16 *p. 176 4, 6-8, 10a, 11-13, 16*	Khan Academy	IXL

3.6 Solve Simple Interest Problems

EQ: What are the parts of the simple interest formula?

Obj: Identify the parts of interest problems and how values are related and understand what simple interest is and how it is calculated.

p. 182 4-8, 10, 17		
p. 182 4-8, 10, 15a, 17	*Khan Academy*	*IXL*

C3 Review

Topic 3 Assessment (Regular and Honors)

4 *Generate Equivalent Expressions*

4.1 Write and Evaluate Algebraic Expressions

EQ: How are algebraic expressions used to represent and solve problems?

Obj: Understand how variables are used to represent unknown values in problems.

p. 200 4-20		
p. 200 4-20	*Khan Academy*	IXL

4.2 Generate Equivalent Expressions

EQ: How does rearranging or combining like terms change the value of an expression?

Obj: Recognize when two expressions are equivalent and use properties of operations to write equivalent expressions.

p. 206 4-10, 12-13, 18		
p. 206 4-10, 12-13, 17a, 18	*Khan Academy*	IXL

4.1-4.2 Review

p. (Regular and Honors)

4.3 Simplify Expressions

EQ: How are like terms combined in order for expressions to be simplified?

Obj: Combine like integer and rational terms.

p. 212 4-16, 20		
p. 212 4-16, 18, 20	*Khan Academy*	IXL

4.4 Expand Expressions

EQ: How do expanded expressions represent an equivalent way to represent the original expression?

Obj: Use the distributive property to expand expressions.

p. 218 4-14, 19-20, 22-23		
p. 218 4-14, 19-23	*Khan Academy*	IXL

4.5 Factor Expressions

EQ: How are the distributive property and common factors used to factor expressions?

Obj: Understand expanding an expressions is the reverse of factoring and identify the GCF of algebraic terms in expressions.

p. 224 3-9, 11, 16a, 18-19		
p. 224 3-9, 11, 15-16a, 18-19	*Khan Academy*	IXL

4.3-3.5 Review

p. (Regular and Honors)

4.6 Add Expressions

EQ: How do the same rules apply for coefficients and constants when adding expressions?

Obj: Use properties of operations to add expressions and model addition of expressions in real-life applications.

p. 236 6-14b, 15-16, 19a	Khan Academy	IXL
p. 236 6-14b, 15-17a, 18-19a		

4.7 Subtract Expressions

EQ: Why do you add the inverse when subtracting expressions?

Obj: Use properties of operations to subtract expressions.

p. 242 4, 6-10, 15, 19a, 20	Khan Academy	IXL
p. 242 4, 6-10, 12, 14-15, 19a, 20		

4.8 Analyze Equivalent Expressions

EQ: Why is understanding mathematical structure or patterns important for solving deeper, unconventional expressions?

Obj: Write equivalent expressions to show how quantities are related in real-life applications.

p. 248 5, 8-11a, 12, 16a	Khan Academy	IXL
p. 248 5, 8-11a, 12, 15-16a		

C4 Review

Topic 4 Assessment (Regular and Honors)

5 Solve Problems Using Equations and Inequalities

5.1 Write Two-Step Equations

EQ: How can equations with more than one operation be used to represent a situation?

Obj: Analyze word problems to write two-step equations and understand the relationship between the terms of the equation and the values they represent.

p. p.	Khan Academy	IXL

5.2 Solve Two-Step Equations

EQ: How are one- and two-step problems both solved using the properties of equality?

Obj: Use models to solve two-step equations and compare algebraic and arithmetic solutions.

p. p.	Khan Academy	IXL

5.3 Solve Equations Using the Distributive Property

EQ: How can the distributive property be used to solve equations of the form $p(x + q) = r$?

Obj: Solve equations using the distributive property.

p. p.	Khan Academy	IXL

5.4 Solve Inequalities Using Addition or Subtraction

EQ: How is solving inequalities with addition and subtraction the same as solving equations?

Obj: Graph the solution of inequalities on a number line and solve inequalities using the addition and subtraction properties of equality.

p. p.	Khan Academy	IXL

5.5 Solve Inequalities Using Multiplication or Division

EQ: How is solving inequalities with multiplication and division similar to solving an equation? What is the biggest difference?

Obj: Write inequalities and solve them using the multiplication and division properties of inequality.

p. p.	Khan Academy	IXL

5.6 Solve Two-Step Inequalities

EQ: What is the process for solving a two-step inequality?

Obj: Write and solve a two-step inequality to solve a problem and solve an inequality by multiplying or dividing by a negative rational number.

p. p.	*Khan Academy*	*IXL*

5.7 Solve Multi-Step Inequalities

EQ: What is the process for solving a multi-step inequality?

Obj: Explore the relationship between two step inequalities and multi-step inequalities and apply the distributive property to simplify and solve multi-step inequalities.

p. p.	*Khan Academy*	*IXL*

8 Solve Problems Involving Geometry

8.1 Solve Problems Involving Scale Drawings

EQ: How can you use a scale drawing to calculate measurements and reproduce proportional scale drawings?

Obj: Use a scale drawing as a representation of actual lengths and area.

p. p.	*Khan Academy*	*IXL*

8.2 Draw Geometric Figures

EQ: What are the relationships between sides and angles in different types of quadrilaterals?

Obj: Sketch quadrilaterals with given conditions and name and classify quadrilaterals according to their properties.

p. p.	*Khan Academy*	*IXL*

8.3 Draw Triangles with Given Conditions

EQ: What are the conditions for triangles?

Obj: Construct triangles with given conditions and conclude whether or not a triangle is formed and what type of triangle it is.

p. p.	*Khan Academy*	*IXL*

8.4 Solve Problems Using Angle Relationships

EQ: How can angle measures be determined when certain conditions about rays and lines are known?

Obj: Calculate the measures of angles by using angle relationships.

p. p.	*Khan Academy*	*IXL*

8.5 Solve Problems Involving Circumference of a Circle

EQ: How are the circumference and radius of a circle related?

Obj: Calculate the circumference, radius, or diameter of a circle and recognize the relationship between the circumference and the diameter of a circle and π.

p. p.	*Khan Academy*	*IXL*

8.6 Solve Problems Involving Area of a Circle

EQ: How do we use formulas to find missing information?

Obj: Find the area of a circle, use the area to find the radius and diameter, and solve problems involving the area of a circle.

p. p.	Khan Academy	IXL

8.7 Describe Cross Sections

EQ: What does a cross section represent?

Obj: Describe the cross sections of right rectangular prisms and pyramids and solve problems involving cross sections.

p. p.	Khan Academy	IXL

8.8 Solve Problems Involving Surface Area

EQ: What are two different methods for finding the surface area of a three-dimensional figure?

Obj: Find the surface area of two-dimensional composite shapes and find the surface area of three-dimensional composite shapes.

p. p.	Khan Academy	IXL

8.9 Solve Problems Involving Volume

EQ: How is volume calculated?

Obj: Calculate the volume of various three-dimensional figures and solve problems involving the volume of three-dimensional figures.

p. p.	Khan Academy	IXL

6 Use Sampling to Draw Inferences About Populations

6.1 Populations and Samples

EQ: Why must representative samples reflect the entire population?

Obj: Distinguish between a population and a sample, establish whether a sample is representative of a population, and generate random samples.

p. p.	Khan Academy	IXL

6.2 Draw inferences from Data

EQ: How can data from random samples be used to make inferences about a population?

Obj: Make qualitative inferences from a sample data set, make quantitative inferences from a sample data set, and make estimates about a population based on a sample date set and assess whether the inferences are valid.

p. p.	Khan Academy	IXL

6.3 Make Comparative Inferences About Populations

EQ: How can data displays be used to make informal comparative influences about two populations?

Obj: Use box plots to compare and make inferences about populations and use the median and IQR of datasets to informally compare and make inferences about two populations.

p. p.	Khan Academy	IXL

6.4 Make More Comparative Inferences About Populations

EQ: How can you use dot plots to compare populations based on measures of center and variability?

Obj: Use the mode, range, mean, and mean absolute deviation to compare populations.

p. p.	Khan Academy	IXL

7 *Probability*

7.1 Understand Likelihood and Probability

EQ: What is probability and how is it measured?

Obj: Use probability to describe the likelihood that an event will occur.

p. p.	Khan Academy	IXL

7.2 Understand Theoretical Probability

EQ: How is theoretical probability measured?

Obj: Understand theoretical probability and how it can be used and use theoretical probability to predict an outcome.

p. p.	Khan Academy	IXL

7.3 Understand Experimental Probability

EQ: Through what method is experimental probability determined?

Obj: Compare theoretical and experimental probability, use experimental probability to make predictions, and explain differences between theoretical and experimental probability.

p. p.	Khan Academy	IXL

7.4 Use Probability Models

EQ: What are the components of a probability model?

Obj: Develop a probability model, use a probability model to evaluate a situation, and use a probability model make an estimate.

p. p.	Khan Academy	IXL

7.5 Determine Outcomes of Compound Events

EQ: How are the possible outcomes of a compound event represented?

Obj: Use a tree diagram, a table, or an organized list to represent the sample space for a compound event.

p. p.	Khan Academy	IXL

7.6 Find Probabilities of Compound Events

EQ: What are sample spaces used for?

Obj: Organize information about a compound event on a table, a tree diagram, or an organized list and find the probability of a compound event.

p. p.	*Khan Academy*	*IXL*

7.7 Simulate Compound Events

EQ: What are some common objects that can be used to practice experimental probability?

Obj: Use different tools to simulate a compound event and model a real-world situation involving a compound event and predict its outcome using a simulation.

p. p.	*Khan Academy*	*IXL*