Pacing Guide – Math 7
Trimester 1

Chapter 1 (Integers)
The Number System
Standards:

- 7.NS.1 I can use a number line to model additive inverse. I can describe real-world situations where opposite quantities have a sum of zero.I can use a number line to model addition of rational numbers. I can describe real world situations that apply to the sum of rational numbers. I can rewrite a subtraction problem as an addition problem using the additive inverse. I can use a number line to model subtraction of rational numbers. I can apply the difference of rational numbers to real world contexts. I can apply the Associative property, Commutative, Additive Identity property of 0 and Associative property to add and subtract rational numbers. I can apply the Additive inverse to add and subtract rational numbers.
- 7.NS.2 I can use the Associative property, the Multiplication Identity Property of 1, the Distributive Property to multiply integers. I can compose real world problems that apply to multiplying integers. I can model/explain that a fraction is a division problem. I understand that if p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. I can interpret quotients of rational numbers by describing real world context that apply to dividing integers. I can apply a property of operation to multiply and divide rational numbers.I can convert a fraction to a decimal by dividing the numerator by the denominator.I know that the decimal of the rational number either terminates or repeats.
- 7.NS.3 I can solve real world problems using the four operations with rational numbers.

1 - The student demonstrates very little understanding of the grade level standard. The student does not show any significant ability to perform the skill.	2 - The student demonstrates incomplete understanding of the grade level standard. The student makes significant errors when performing the skill.	3 - The student demonstrates complete understanding of the grade level standard with very few errors in computation.	4 - The student demonstrates complete and detailed understanding of the grade level standard *and* exhibits some understanding of the next grade level standard.

Chapter 2 (Rational Numbers)
The Number System
Standards:

- 7.NS.1 I can use a number line to model additive inverse. I can describe real-world situations where opposite quantities have a sum of zero.I can use a number line to model addition of rational numbers. I can describe real world situations that apply to the sum of rational numbers. I can rewrite a subtraction problem as an addition problem using the additive inverse. I can use a number line to model subtraction of rational numbers. I can apply the difference of rational numbers to real world contexts. I can apply the Associative property, Commutative, Additive Identity property of 0 and Associative property to add and subtract rational numbers. I can apply the Additive inverse to add and subtract rational numbers.
- 7.NS.2 I can use the Associative property, the Multiplication Identity Property of 1, the Distributive Property to multiply integers. I can compose real world problems that apply to multiplying integers. I can model/explain that a fraction is a division problem. I understand that if p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. I can interpret quotients of rational numbers by describing real world context that apply to dividing integers. I can apply a property of operation to multiply and divide rational numbers.I can convert a fraction to a decimal by dividing the numerator by the denominator.I know that the decimal of the rational number either terminates or repeats.
- 7.NS.3 I can solve real world problems using the four operations with rational numbers.

1 - The student demonstrates very little understanding of the grade level standard. The student does not show any significant ability to perform the skill.	2 - The student demonstrates incomplete understanding of the grade level standard. The student makes significant errors when performing the skill.	3 - The student demonstrates complete understanding of the grade level standard with very few errors in computation.	4 - The student demonstrates complete and detailed understanding of the grade level standard *and* exhibits some understanding of the next grade level standard.

Chapter 3 (Expressions and Equations)

Expressions and Equations

Standards:

- 7. EE.1 I can apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
- 7. EE. 2 I can rewrite an expression in different forms.
- 7.EE. 4a I can solve word problems leading to equations of the px+q=r and p(x+q)=r, where p, q, and r are rational numbers. I can compare an algebraic solutions to an arithmetic solution. I can identify the sequence of the operations used in each approach.

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Pacing Guide – Math 7
Trimester 2

Chapter 4 (Inequalities)

Expressions and Equations

Standards:

- 7. EE. 4b I can solve word problems leading to inequalities of the form px+q>r or px+q<r , where p, q, and r are rational numbers. I can graph the solution set of the inequality and interpret it in the context of the solution.

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Chapter 5 (Ratios and Proportions)

Ratios and Proportional Relationships

Standards:

- 7. RP. 1 I can compute unit rates with ratios of fractions.
- 7. RP. 2 I can decide whether two quantities are in a proportional relationship. I can identify the constant of proportionality (unit rate). I can explain what a point (x,y) on the graph of a proportional relationship means. I can represent proportional relationships by equations.
- 7. RP. 3 I can compute a multistep ratio problem using proportional relationships. I can compute a multistep percent problem using proportional relationships.

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Pacing Guide – Math 7
Trimester 3

Chapter 6 (Percents)

Ratios and Proportions, Expressions and Equations

Standards:

- 7. EE.3 I can solve multi-step real world problems using positive and negative rational numbers (fractions, decimals, and percents).I can solve multi-step real world problems by applying the properties of operations.I can use mental computation and estimation strategies to determine if my answer makes sense
- 7.RP.3 I can compute a multistep ratio problem using proportional relationships. I can compute a multistep percent problem using proportional relationships.

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Chapter 7 (Constructions and Scale Drawings)

Geometry

Standards:

- 7. G.2 I can draw a geometric shape with specific conditions.I can construct a triangle when given three side lengths and/or angle measurements.I can construct a triangle when given three angle measurements.I can construct a triangle when given a combination of side and angle measurements.I can determine the conditions that will result in unique triangles, multiple triangles, or no triangle.
- 7. G.1 I can use a scale drawing to determine the actual dimensions of a geometric figure.I can use a scale drawing to determine the actual area of a geometric figure.I can change scales on similar drawings.

- 7.G.5 I can state the relationship between supplementary, complementary and vertical angles.I can use angle relationships to write algebraic equations for unknown angles.I can use algebraic reasoning and angle relationships to solve multi-step problems

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Chapter 8 (Circles and Area)

Geometry

Standards:

- 7.G.4 I can identify the parts of a circle.I know that circumference of a circle is the distance around the circle.I can explain/show how the formulas for area and circumference of circles are derived.I can state the formula for finding the area of a circle.I can state the formula for finding the circumference of a circle.I can use formulas to find the area and circumference of a circle.I can determine the diameter and radius of a circle when the circumference is given.I can use a ratio and algebraic reasoning to compare the area and circumference of a circle.
- 7.G.6 I can determine the area of two-dimensional figures including those found in real-world contexts.I can determine the surface area of three-dimensional figures found in real-world
- contexts.I can determine the volume of three-dimensional figures found in real-world contexts.

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Chapter 9 (Surface Area and Volume)

Geometry

Standards:

- 7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.
- 7.G.4 I can identify the parts of a circle.I know that circumference of a circle is the distance around the circle.I can explain/show how the formulas for area and circumference of circles are derived.I can state the formula for finding the area of a circle.I can state the formula for finding the circumference of a circle.I can use formulas to find the area and circumference of a circle.I can determine the diameter and radius of a circle when the circumference is given.I can use a ratio and algebraic reasoning to compare the area and circumference of a circle.
- 7.G.6 I can determine the area of two-dimensional figures including those found in real-world contexts.I can determine the surface area of three-dimensional figures found in real-world contexts.I can determine the volume of three-dimensional figures found in real-world contexts.

1 - The student demonstrates very little	2 - The student demonstrates incomplete understanding of the	3 - The student demonstrates complete understanding of the grade	4 - The student demonstrates complete and

understanding of the grade level standard. The student does not show any significant ability to perform the skill.	grade level standard. The student makes significant errors when performing the skill.	level standard with very few errors in computation.	detailed understanding of the grade level standard *and* exhibits some understanding of the next grade level standard.

Chapter 10 (Probability and Statistics)

Statistics and Probability

Standards:

- 7. SP.1 I can apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
- 7. SP. 2 I can rewrite an expression in different forms.
- 7.SP.3 I can informally access the degree of visual overlap of two data distributions using measures of variability and center.
- 7.SP.4 I can use measures of center and variability from random samples to draw inferences about populations.
- 7.SP.5 I can understand that probability of a change even is a number between 0 and 1.
- 7.SP.6 I can approximate the probability of a chance event by collecting data and observing its long-run relative frequency.
- 7.SP.7 I can develop a probability model to find the probability of events. I can compare probabilities from a model to observe frequences.
- 7.SP.8 I can find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.

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