

Twin Rivers USD
Grade Seven Common Core Math Pacing
2017-2018

Trimester 1

Pretest (optional) August 9

- **Trimester 1 Pretest Exam**
 Use the information as an additional pacing tool to guide instruction.

Unit 1: The Number System-Part 1

Instructional Window (12 days): August 10 – August 25

Standard(s)

- 7.NS.1:** Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.
- a. Describe situations in which opposite quantities combine to make 0. *For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.*
 - b. Understand $p+q$ as the number located a distance $|q|$ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.
 - c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
 - d. Apply properties of operations as strategies to add and subtract rational numbers.

7.NS.3: Solve real-world and mathematical problems involving the four operations with rational numbers.

Go Math Lessons Covered in Unit 1

1.1, 1.2, 1.3, 1.4, 3.2, 3.3

Go Math Lesson	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus	TE pg. #
1.1	Lesson 1 Combine to Make Zero (<i>m</i>)	7.NS.1a	C	2
1.1	Lesson 2 Combine to Make Zero (<i>m</i>)	7.NS.1a	P	12
1.1, 1.2, 1.4	Lesson 3 Add Integers (<i>m</i>)	7.NS.1bd	C	22

m-major cluster, *s*-supporting cluster, *a*-additional cluster

1.1, 1.2, 1.4	Lesson 4 Add Integers (<i>m</i>)	7.NS.1b	P	34
3.2	Lesson 5 Add Rational Numbers (<i>m</i>)	7.NS.1bd	P	46
N/A	Lesson 6 Sums of Rational Numbers (<i>m</i>)	7.NS.3	MT	56
1.3, 1.4	Lesson 7 Subtract Integers (<i>m</i>)	7.NS.1cd	C	60
1.3, 1.4	Lesson 8 Subtract Integers (<i>m</i>)	7.NS.1c	P	70
3.3	Lesson 9 Subtract Rational Numbers (<i>m</i>)	7.NS.1cd	P	80
3.2, 3.3	Lesson 10 Add & Subtract Rational Numbers (<i>m</i>)	7.NS.1abc	P	90
N/A	Lesson 11 Differences of Rational Numbers (<i>m</i>)	7.NS.3	MT	102

Suggested Unit 1 Assessment Date – August 28 & 29

Unit 2: The Number System-Part 2

Instructional Window (20 days): August 30 – September 27

Standard(s)

- 7.NS.2:** Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
- Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
 - Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.
 - Apply properties of operations as strategies to multiply and divide rational numbers.
 - Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.

7.NS.3: Solve real-world and mathematical problems involving the four operations with rational numbers.

Go Math Lessons Covered in Unit 2

2.1, 2.2, 3.1, 3.4, 3.5, 3.6,

m-major cluster, *s*-supporting cluster, *a*-additional cluster

Go Math Lesson	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus	TE pg. #
2.1	Lesson 1 Multiply Integers (<i>m</i>)	7.NS.2a	C	108
2.1	Lesson 2 Multiply Integers (<i>m</i>)	7.NS.2a	P	118
3.4	Lesson 3 Multiply Rational Numbers (<i>m</i>)	7.NS.2a	P	130
N/A	Lesson 4 Multiply Integers: Distributive Property (<i>m</i>)	7.NS.2a	C	140
N/A	Lesson 5 Multiply Integers: Distributive Property (<i>m</i>)	7.NS.2a	P	150
N/A	Lesson 6 Multiply Rational Numbers: Distributive Property (<i>m</i>)	7.NS.2a	P	162
3.4, 3.6	Lesson 7 Word Problems: Interpret Products (<i>m</i>)	7.NS.2a, 7.NS.3	P	172
2.2	Lesson 8 Divide Integers (<i>m</i>)	7.NS.2b	C	184
2.2	Lesson 9 Divide Integers (<i>m</i>)	7.NS.2b	P	194
3.5	Lesson 10 Divide Rational Numbers (<i>m</i>)	7.NS.2b	P	204
3.6	Lesson 11 Word Problems: Interpret Quotients (<i>m</i>)	7.NS.2b	P	214
N/A	Lesson 12 Multiply & Divide Integers (<i>m</i>)	7.NS.2abc, 7.NS.3	MT	228
N/A	Lesson 13 Properties of Multiplication & Division (<i>m</i>)	7.NS.2c	C	234
N/A	Lesson 14 Properties of Multiplication & Division (<i>m</i>)	7.NS.2c	P	244
3.1	Lesson 15 Convert Rational Numbers to Decimals (<i>m</i>)	7.NS.2d	P	254
3.1	Lesson 16 Convert Decimals to Rational Numbers (<i>m</i>)	7.NS.2d	P	266
3.6	Lesson 17 Word Problems: Rational Numbers (<i>m</i>)	7.NS.3	P	278
N/A	Lesson 18 Problem Solving with Rational Numbers (<i>m</i>)	7.NS.3	MT	290

Suggested Unit 2 Assessment Date – September 28 & 29

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Unit 3: Ratio & Proportional Relationships

Instructional Window (18 days): September 2 – October 25

Standard(s)

7.RP.1: Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. *For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex $\frac{1/2}{1/4}$ fraction miles per hour, equivalently 2 miles per hour.*

7.RP.2: Recognize and represent proportional relationships between quantities.

- Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
- Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
- Represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p , the relationship between the total cost and the number of items can be expressed as $t=pn$.*
- Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0,0)$ and $(1, r)$ where r is the unit rate.

Go Math Lessons Covered in Unit 3

4.1, 4.2, 4.3

Go Math Lesson	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus	TE pg. #
4.1	Lesson 1 Unit Rates (<i>m</i>)	7.RP.1	C	298
4.1	Lesson 2 Unit Rates (<i>m</i>)	7.RP.1	P	308
4.1	Lesson 3 Unit Rates (<i>m</i>)	7.RP.1	P	320
4.1	Lesson 4 Word Problems: Unit Rates (<i>m</i>)	7.RP.1	P	334
4.3	Lesson 5 Proportional Relationships: Tables (<i>m</i>)	7.RP.2a	C	348
4.3	Lesson 6 Proportional Relationships: Tables (<i>m</i>)	7.RP.2a	P	360
4.3	Lesson 7 Application of Proportional Relationships (<i>m</i>)	7.RP.2a	P	374
4.3	Lesson 8 Proportional Relationships: Graphs (<i>m</i>)	7.RP.2d	C	388
4.3	Lesson 9 Proportional Relationships: Graphs (<i>m</i>)	7.RP.2d	P	400
N/A	Lesson 10 Ratio & Proportions (<i>m</i>)	7.RP.2	MT	416
4.2	Lesson 11 Constant of Proportionality (<i>m</i>)	7.RP.2b	C	422
4.2	Lesson 12 Constant of Proportionality (<i>m</i>)	7.RP.2b	P	434

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4.2	Lesson 13 Proportional Relationships: Equations (<i>m</i>)	7.RP.2c	C	452
4.2	Lesson 14 Proportional Relationships: Equations (<i>m</i>)	7.RP.2c	P	462
4.2, 4.3	Lesson 15 Determining Proportional Relationships (<i>m</i>)	7.RP.2	P	476
N/A	Lesson 16 Test for Proportional Relationships (<i>m</i>)	7.RP.2	MT	488

***Suggested* OPTIONAL Unit 3 Assessment Date – October 26 & 27**

End of Trimester 1 Assessments

***Suggested Review Day* for Trimester 1 Benchmark Date – October 30**
***Suggested* Trimester 1 Cumulative Benchmark Date –November 1 & 2**
Performance Task – November 3 & 6

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