Grade 7 EOY

Evidence Statement Key	Evidence Statement Text	Clarifications	MP	Calculator
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* 1/2 *mile in each* 1/4 *hour, compute the unit rate as the complex fraction* $\frac{1/2}{1/4}$ *miles per hour, equivalently 2 miles per hour.*	i) Tasks have a context.	2, 6, 4	Yes
7.RP.2a	Recognize and represent proportional relationships between quantities. a. 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.	i) Tasks have "thin context" or no context. ii) Tasks may offer opportunities for students to investigate a relationship by constructing graphs or tables; however, students can opt not to use these tools. iii) Tasks are not limited to ratios of whole numbers.	2, 5	Yes
7.RP.2b	Recognize and represent proportional relationships between quantities. b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	i) Pool should contain tasks with and without context. ii) Tasks sample equally across the listed representations (graphs, equations, diagrams, and verbal descriptions).	2, 8, 5	No
7.RP.2c	Recognize and represent proportional relationships between quantities. c. 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 total the total cost and the number of items can be expressed as* $t = pn$.	i) Tasks have a context	2, 8	No
7.RP.2d	Recognize and represent proportional relationships between quantities. d. 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.	i) Tasks require students to interpret a point (x, y) on the graph of a proportional relationship in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.	2, 4	No

Grade 7 EOY

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7.RP.3-1	Use proportional relationships to solve multi-step ratio problems.		1, 2, 6	Yes
7.RP.3-2	Use proportional relationships to solve multi-step percent problems. *Examples*: *simple interest, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error*.		1, 2, 5, 6	Yes
7.NS.1a	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*.	i) Tasks require students to recognize or identify situations of the kind described in standard 7.NA.1a.	5	No
7.NS.1b-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. 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.	i) Tasks do not have a context. ii) Tasks are not limited to integers. iii) Tasks involve a number line. iv) Tasks do not require students to show in general that a number and its opposite have a sum of 0.	5, 7	No
7.NS.1b-2	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. b. Interpret sums of rational numbers by describing real-world contexts.	i) Tasks require students to produce or recognize real-world contexts that correspond to given sums of rational numbers. ii) Tasks are not limited to integers. iii) Tasks do not require students to show in general that a number and its opposite have a sum of 0.	2, 3, 5	No

Grade 7 EOY

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7.NS.1c-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. c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Apply this principle in real-world contexts.	i) Pool should contain tasks with and without contexts. ii) Contextual tasks might, for example, require students to create or identify a situation described by a specific equation of the general form $p - q = p + (-q)$ such as $3 - 5 = 3 + (-5)$. iii) Non-contextual tasks are not computation tasks but rather require students to demonstrate conceptual understanding, for example by identifying a sum that is equivalent to a given distance. For example, given the difference $-\frac{1}{3} - \left(\frac{1}{5} + \frac{5}{8}\right)$, the student might be asked to recognize the equivalent expression $-\frac{1}{3} + -\left(\frac{1}{5} + \frac{5}{8}\right)$. iv) Tasks are not limited to integers.	2, 7, 5	No
7.NS.1d	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. d. Apply properties of operations as strategies to add and subtract rational numbers.	i) Tasks do not have a context. ii) Tasks are not limited to integers. iii) Tasks may involve sums and differences of 2 or 3 rational numbers. iv) Tasks require students to represent addition and subtraction on a horizontal or vertical number line, or compute a sum or difference, or demonstrate conceptual understanding for example by producing or recognizing an expression equivalent to a given sum or difference. For example, given the sum $-8.1 + 7.4$, the student might be asked to recognize or produce the equivalent expression $-(8.1 - 7.4)$.	7, 5	No

Grade 7 EOY

Evidence Statement Key	Evidence Statement Text	Clarifications	MP	Calculator
7.NS.2a-1	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. a. 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.	i) Tasks do not have a context. ii) Tasks are not computation tasks but rather require students to demonstrate conceptual understanding, for example by providing students with a numerical expression and requiring students to produce or recognize an equivalent expression using properties of operations, particularly the distributive property. For example, given the expression $(-3)(6+-4+-3)$, the student might be asked to recognize that the given expression is equivalent to $(-3)(6+-4)+(-3)(-3)$.	7	No
7.NS.2a-2	Apply and extend previous understanding of multiplication and division and of fractions to multiply and divide rational numbers. a. Interpret products of rational numbers by describing real-world contexts.	None	2, 4	No
7.NS.2b-1	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. b. 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 $-\left(\frac{p}{q}\right)=\frac{(-p)}{q}=\frac{p}{(-q)}$.	i) Tasks do not have a context. ii) Tasks are not computation tasks but rather require students to demonstrate conceptual understanding, for example by providing students with a numerical expression and requiring students to produce or recognize an equivalent expression.	7	No
7.NS.2b-2	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. c. Interpret quotients of rational numbers by describing real-world contexts.	None	2, 4	No

Grade 7 EOY

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7.NS.2c	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. c. Apply properties of operations as strategies to multiply and divide rational numbers.	i) Tasks do not have a context. ii) Tasks are not limited to integers. iii) Tasks may involve products and quotients of 2 or 3 rational numbers. iv) Tasks require students to compute a product or quotient, or demonstrate conceptual understanding for example by producing or recognizing an expression equivalent to a given expression. For example, given the product $\frac{(-8)(6)}{(-3)}$, the student might be asked to recognize or produce the equivalent expression $-\left(\frac{8}{3}\right)(-6)$.	7	No
7.NS.3	Solve real-world and mathematical problems involving the four operations with rational numbers.	i) Tasks are one-step word problems. ii) Tasks sample equally between addition/subtraction and multiplication/division. iii) Tasks involve at least one negative number. iv) Tasks are not limited to integers.	1, 4	No
7.EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	i) Tasks may involve issues of strategy, e.g., by providing a factored expression such as $y(3+x+k)$ and a fully expanded expression $3y+xy+ky$, and requiring students to produce or identify a new expression equivalent to both (such as $y(3+x)+yk$). ii) Tasks are not limited to integer coefficients.	7	No
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. *For example,* $a+0.05a=1.05a$ *means that "increase by* 5%*" is the same as "multiply by* 1.05.*"*	None	7	No

Grade 7 EOY

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7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole number, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *For example*: *If a woman making* \$25 *an hour gets a* 10% *raise, she will make an additional* 1/10 *of her salary an hour, or* \$2.50, *for a new salary of* \$27.50. *If you want to place a towel bar* $9\frac{3}{4}$ *inches long in the center of a door that is* $27\frac{1}{2}$ *inches wide, you will need to place the bar about* 9 *inches from each edge; this estimate can be used as a check on the exact computation.*		5	Yes
7.EE.4a-1	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where *p*, *q*, and *r* are specific rational numbers.	i) Comparison of an algebraic solution to an arithmetic solution is not assessed here; this aspect of standard 7.EE.4a may be assessed on the Grade 7 PBA.	1, 2, 6, 7	No
7.EE.4a-2	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Fluently solve equations of the form $px + q = r$ and $p(x + q) = r$, where *p*, *q*, and *r* are specific rational numbers.	i) Each task requires students to solve two equations (one of each of the given two forms). Only the answer is required. ii) Fluency is assessed implicitly by requiring the student to solve two equations. Tasks are not timed. iii) Comparison of an algebraic solution to an arithmetic solution is not assessed here; this aspect of standard 7.EE.4a may be assessed on the Grade 7 PBA.	6, 7	No

Grade 7 EOY

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7.EE.4b	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example*: *As a salesperson you are paid* \$50 *per week plus* \$3 *per sale*. *This week you want your pay to be at least* \$100. *Write an inequality for the number of sales you need to make, and describe the solutions*.	None	1, 2, 6, 7, 5	No
7.G.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	i) Pool should contain tasks with and without contexts.	2, 5	Yes
7.G.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	i) Tasks do not have a context.	3, 5, 6	Yes
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.	i) Tasks have "thin context" or no context.	5	Yes
7.G.4-1	Know the formulas for the area and circumference of a circle and use them to solve problems.	i)Pool should contain tasks with and without contexts ii) The testing interface can provide students with a calculation aid of the specified kind for these tasks. iii) Tasks may require answers to be written in terms of π.	4, 5	Yes
7.G.4-2	Give an informal derivation of the relationship between the circumference and area of a circle.	i) Tasks require students to identify or produce a logical conclusion about the relationship between the circumference and the area of a circle, e.g., that given three circles with areas $A1 > A2 > A3$, the circumferences satisfy $C1 > C2 > C3$.	2, 5	Yes

Grade 7 EOY

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7.G.5	Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	i) Pool should contain tasks with and without contexts.	5, 6	Yes
7.G.6	Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	i) Pool should contain tasks with and without contexts. ii) Tasks focus on area of two-dimensional objects.	1, 5	Yes
7.SP.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	i) The testing interface can provide students with a calculation aid of the specified kind for these tasks.	4	Yes
7.SP.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. *For example, estimate the mean word length in a book by randomly sampling words from the book*; *predict the winner of a school election based on randomly sampled survey data*. *Gauge how far off the estimate or prediction might be*.		4	Yes
7.SP.3	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. *For example, the mean height of players on the basketball team is* 10 *cm greater than the mean height of players on the soccer team, about twice the variability* (*mean absolute deviation*) *on either team*; *on a dot plot, the separation between the two distributions of heights is noticeable*.	i) Tasks may use mean absolute deviation or range as a measure of variability.	4	Yes

Grade 7 EOY

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7.SP.4	Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh grade science book are generally longer than the words in a chapter of a fourth grade science book.*		4	Yes
7.SP.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.		4	Yes
7.SP.6	Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. *For example, when rolling a number cube* 600 *times, predict that a* 3 *or* 6 *would be rolled roughly 200 times, but probably not exactly* 200 *times*.	i) Tasks require the students to make a prediction based on long-run relative frequency in data from a chance process. Data can be provided, or if the task is technology-enhanced, the task can simulate a data-gathering process.	4	Yes
7.SP.7a	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. *For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.*	i) Simple events only.	4	Yes

Grade 7 EOY

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7.SP.7b	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. *For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies*?	i) Data can be provided, or if the task is technology-enhanced, the task can simulate a data-gathering process.	4	Yes
7.SP.8a	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.		4, 5	Yes
7.SP.8b	Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.		4, 5	Yes
7.SP.8c	Find the probabilities of compound events using organized lists, tables, tree diagrams, and simulation. c. Design and use a simulation to generate frequencies for compound events. *For example, use random digits as a simulation tool to approximate the answer to the question. If* 40% *of donors have type A blood, what is the probability that it will take at least* 4 *donors to find one with type A blood*?		4, 5	Yes