GRADE 7
STAAR Format
Mini-Assessments
And
Periodic Assessments
GRADE 7
STAAR Format
Mini-Assessments

Organized by
TEKS Categories
Overview
Grade 7 Mini-assessments and Periodic Assessments

MINI-ASSESSMENTS

The Mini-Assessments were created with all students in mind and provides teachers with 10 questions that address each TEKS in each STAAR REPORTING CATEGORY with focus on the Process Standard TEKS. Each Mini-Assessment is correlated to a specific Category and TEKS. These assessments should not be utilized until after all instruction has been completed for the TEKS addressed in the assessment.

- The Mini-Assessment can be utilized at any time after instruction has occurred for the TEKS addressed in the assessment.
- Allow approximately 20 minutes for completion of each Mini-Assessment. The time may vary for some assessments.
- The Mini-Assessment should be completed by individual students, graded by the teacher and performance discussed by the teacher with individual students.
- Results can and should be recorded in the Class Profile to reflect the entire class performance and on the Student Profile for the student’s performance.

PERIODIC ASSESSMENTS

The Periodic Assessments were created with all students in mind and provides teachers with 20 questions that periodically assess multi-TEKS. Each question is correlated to a specific Category and TEKS. These assessments should not be utilized until after all instruction has been completed for all TEKS addressed in the assessment.

- The Periodic Assessment can be utilized at any time after instruction has occurred for all the TEKS addressed in the assessment.
- Allow approximately 40 minutes for completion of each Periodic Assessment. The time may vary for some assessments.
- The Mini-Assessment should be completed by individual students, graded by the teacher and performance discussed by the teacher with individual students.
- Results can and should be recorded in the Class Profile to reflect the entire class performance and on the Student Profile for the student’s performance.

An answer key is provided for the Mini-Assessments and Periodic Assessments. Teachers should consider creating a personal Solution Manual to become more familiar with the Revised TEKS and assessment of the Revised TEKS, as well as formulate various solution strategies for each question. Teachers are encouraged to communicate with the author regarding discussion of any question in this document.
Mathematical Process Standards

These student expectations will not be listed separately. They will be incorporated into assessments for TEKS in other categories since the application of mathematical process standards is part of each knowledge statement for all other TEKS.

7.(1) Mathematical Process Standards
The student uses mathematical processes to acquire and demonstrate mathematical understanding.

<table>
<thead>
<tr>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>7.1(A)</td>
<td>apply mathematics to problems arising in everyday life, society, and the workplace</td>
</tr>
<tr>
<td>7.1(B)</td>
<td>use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution</td>
</tr>
<tr>
<td>7.1(C)</td>
<td>select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems</td>
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<tr>
<td>7.1(D)</td>
<td>communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate</td>
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<tr>
<td>7.1(E)</td>
<td>create and use representations to organize, record, and communicate mathematical ideas</td>
</tr>
<tr>
<td>7.1(F)</td>
<td>analyze mathematical relationships to connect and communicate mathematical ideas</td>
</tr>
<tr>
<td>7.1(G)</td>
<td>display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication</td>
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</table>
### Number and Operations

#### 7.(2) Number and Operations
The student applies mathematical process standards to represent and use rational numbers in a variety of forms.

<table>
<thead>
<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.2(A)</td>
<td>extend previous knowledge of sets and subsets using visual representations to describe relationships between sets of rational numbers</td>
</tr>
</tbody>
</table>

#### 7.(3) Number and Operations
The student applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions.

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<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.3(A)</td>
<td>add, subtract, multiply, and divide rational numbers fluently</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.3(B)</td>
<td>apply and extend previous understanding of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers</td>
</tr>
</tbody>
</table>
Proportionality

### 7.(4) Proportionality

The student applies mathematical process standards to represent and solve problems involving proportional relationships.

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<thead>
<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>7.4(A)</td>
<td>represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical and algebraic representations, including ( d = rt )</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.4(B)</td>
<td>calculate unit rates from rates in mathematical and real-world problems</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.4(C)</td>
<td>determine the constant of proportionality ( (k = \frac{y}{x}) ) within mathematical and real-world problems</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.4(D)</td>
<td>solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.4(E)</td>
<td>convert between measurement systems, including the use of proportions and the use of unit rates</td>
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</table>

Proportionality

### 7.(5) Proportionality

The student applies mathematical process standards to use geometry to describe or solve problems involving proportional relationships.

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<tr>
<th>STAAR Standard</th>
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<tbody>
<tr>
<td>Supporting</td>
<td>7.5(A)</td>
<td>generalize the critical attributes of similarity, including ratios within and between similar shapes</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.5(B)</td>
<td>describe ( \pi ) as the ratio of the circumference of a circle to its diameter</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.5(C)</td>
<td>solve mathematical and real-world problems involving similar shapes and scale drawings</td>
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</table>

Proportionality

### 7.(6) Proportionality

The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships.

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<tr>
<th>STAAR Standard</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.6(A)</td>
<td>represent sample spaces for simple and compound events using lists and tree diagrams</td>
</tr>
<tr>
<td>Not Tested</td>
<td>7.6(B)</td>
<td>select and use different simulations to represent simple and compound events with and without technology</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.6(C)</td>
<td>make predictions and determine solutions using experimental data for simple and compound events</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.6(D)</td>
<td>make predictions and determine solutions using theoretical probability for simple and compound events</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.6(E)</td>
<td>find the probabilities of a simple event and its complement and describe the relationship between the two</td>
</tr>
</tbody>
</table>
## Proportionality

### 7.(6) Proportionality

The student applies mathematical process standards to use probability and statistics to describe or solve problems involving proportional relationships.

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<tr>
<th>STAAR Standard</th>
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</thead>
<tbody>
<tr>
<td>Not tested</td>
<td>7.6(F)</td>
<td>use data from a random sample to make inferences about a population</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.6(G)</td>
<td>solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.6(H)</td>
<td>solve problems using qualitative and quantitative predictions and comparisons from simple experiments</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.6(I)</td>
<td>determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces</td>
</tr>
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</table>
## Expressions, Equations, and Relationships

### 7.(7) Expressions, Equations, and Relationships
The student applies mathematical process standards to represent linear relationships using multiple representations.

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<tr>
<th>STAAR Standard</th>
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<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>7.7(A)</td>
<td>represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$</td>
</tr>
</tbody>
</table>

### 7.(8) Expressions, Equations, and Relationships
The student applies mathematical process standards to develop geometric relationships with volume.

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<tr>
<th>STAAR Standard</th>
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<th>STUDENT EXPECTATION</th>
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<tbody>
<tr>
<td>Not Tested</td>
<td>7.8(A)</td>
<td>model the relationship between the volume of a rectangular prism and a rectangular pyramid having both congruent bases and heights and connect the relationship to the formulas</td>
</tr>
<tr>
<td>Not Tested</td>
<td>7.8(B)</td>
<td>explain verbally and symbolically the relationship between the volume of a triangular prism and a triangular pyramid having both congruent bases and heights and connect that relationship to the formulas</td>
</tr>
<tr>
<td>Not Tested</td>
<td>7.8(C)</td>
<td>use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas</td>
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</tbody>
</table>

### 7.(9) Expressions, Equations, and Relationships
The student applies mathematical process standards to solve geometric problems.

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<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>7.9(A)</td>
<td>solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramid</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.9(B)</td>
<td>determine the circumference and area of circles</td>
</tr>
<tr>
<td>Readiness</td>
<td>7.9(C)</td>
<td>determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.9(D)</td>
<td>solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism and triangular pyramid by the determining the area of the shape’s net</td>
</tr>
</tbody>
</table>

### 7.(10) Expressions, Equations, and Relationships
The student applies mathematical process standards to use one-variable equations and inequalities to represent situations.

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<tr>
<th>STAAR Standard</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.10(A)</td>
<td>write one-variable two-step equations and inequalities to represent constraints or conditions within the problem</td>
</tr>
</tbody>
</table>
### Expressions, Equations, and Relationships

#### 7.(10) Expressions, Equations, and Relationships
The student applies mathematical process standards to use one-variable equations and inequalities to represent situations.

<table>
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<tr>
<th>STAAR Standard</th>
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<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.10(B)</td>
<td>represent solutions for one-variable, two-step equations and inequalities on number lines</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.10(C)</td>
<td>write a corresponding real-world problems given one-variable, two-step equation or inequality</td>
</tr>
</tbody>
</table>

### Expressions, Equations, and Relationships

#### 7.(11) Expressions, Equations, and Relationships
The student applies mathematical process standards to solve one-variable equations and inequalities.

<table>
<thead>
<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>7.11(A)</td>
<td>model and solve one-variable, two-step equations and inequalities</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.11(B)</td>
<td>determine if the given value(s) make(s) one-variable, two-step equations and inequalities true</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.11(C)</td>
<td>write and solve equations using geometry concepts including the sums of angles in a triangle, and angle relationships</td>
</tr>
</tbody>
</table>
### Measurement and Data

#### 7.(12) Measurement and Data

The student applies mathematical process standards to use statistical representations to analyze data.

<table>
<thead>
<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>7.12(A)</td>
<td>compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.12(B)</td>
<td>use data from random sample to make inferences about a population</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.12(C)</td>
<td>compare two populations bases on data in random samples from these populations, including informal comparative inferences about differences between the two populations</td>
</tr>
</tbody>
</table>
### Personal Financial Literacy

#### 7.(14) Personal Financial Literacy

The student applies mathematical processes standards to develop an economic way of thinking and problem solving useful in one’s life as a knowledgeable consumer and investor.

<table>
<thead>
<tr>
<th>STAAR Standard</th>
<th>TEKS</th>
<th>STUDENT EXPECTATION</th>
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</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>7.14(A)</td>
<td>calculate the sales tax for a given purchase and calculate income tax for earned wages</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.14 (B)</td>
<td>identify the components of a personal budget, including income; planned savings for college, retirement, and emergencies; and fixed and variable expenses, and calculate what percentage each category comprises of the total budget</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.14 (C)</td>
<td>create and organize a financial assets and liabilities record and construct a net worth statement</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.14 (D)</td>
<td>use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student’s city or another large city nearby</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.14 (E)</td>
<td>calculate and compare simple interest and compound interest earnings</td>
</tr>
<tr>
<td>Supporting</td>
<td>7.14 (F)</td>
<td>analyze and compare monetary incentives, including sales, rebates, and coupons</td>
</tr>
<tr>
<td>TEKS Assessed</td>
<td>Question Number</td>
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## PROPORTIONALITY

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## PROPORTIONALITY

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## TEKSING TOWARD STAAR
GRADE 7 MINI-ASSESSMENTS ANSWER KEY

### EXPRESSIONS, EQUATIONS, AND RELATIONSHIPS

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GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 1
Numbers and Operations
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 1
7.2A
1. Which number does NOT represent a whole number?
   A 25
   B 13
   C \( \frac{150}{3} \)
   D 3.5

2. Which of the following is a rational number but is NOT an integer?
   F 8
   G 24
   H \( \frac{40}{4} \)
   J 6.2

3. Barbara was asked to create a set of numbers that contained only integers. Which of the sets does NOT contain only integers?
   A \( \{11, 6, -3, -4, 600, \frac{24}{12}\} \)
   B \( \{9, 100, -4, 12, -6, \frac{20}{5}\} \)
   C \( \{5, 3, -8, -14, 3.5, \frac{24}{12}\} \)
   D \( \{22, -12.0, 9, -14, 28, 4\} \)

4. Which statement is NOT true about integers?
   F All integers are rational numbers.
   G If two integers are added, the sum is always an integer.
   H If two integers are subtracted, the difference is always an integer.
   J If two integers are divided, the quotient is always an integer.
5. This Venn diagram shows the relationship of the rational numbers.

Which of the following is an integer but NOT a whole number?

A  4  
B  -8  
C  \( \frac{28}{7} \)  
D  100  

6. Rational numbers are a dense set. This means that between any two rational numbers on a number line there is another rational number. Which rational number is between 2.46 and 2.47 on a number line?

F  2.48  
G  2.4  
H  2.53  
J  2.468  

7. Golf scores are often given as a comparison to the number of strokes the player had to the number of strokes for par score for that course. Which subset of the rational numbers best describes the golf scores shown for the players in a golf tournament?

A  Whole numbers  
B  Integers  
C  Negative integers  
D  Repeating decimals
8. Which subset of the rational numbers best describes number of coins in a jar?
   F Whole numbers
   G Integers
   H Negative integers
   J Repeating decimals

9. Which subset of the rational numbers best describes the dimensions of a rectangle?
   A Whole numbers
   B Integers
   C Negative integers
   D Positive rational numbers

10. Which statement is NOT true about rational numbers?
    F The sum of two rational numbers is also a rational number.
    G 0 is not a rational number.
    H The product of two rational numbers is also a rational number.
    J The opposite of a rational number is also a rational number.
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 1
7.3A
1. Which represents \( \frac{2}{3} + \frac{1}{4} \)?

A 1  
B \( \frac{3}{7} \)  
C \( \frac{11}{12} \)  
D \( \frac{13}{12} \)

2. Mrs. Bird’s back yard is 125.2 square yards. Her neighbor’s back yard is 1.4 times as large as hers. What is the area of the neighbor’s yard?

F 126.6 square yards  
G 175.28 square yards  
H 185.78 square yards  
J 89.4 square yards

3. At 8 a.m. the temperature was 56°F. By noon a storm had arrived, and the temperature was 43°F. Which describes the change in the temperature from 8 a.m. until noon?

A 99°F  
B −13°F  
C 13°F  
D −17°F

4. What is the value of \(-36 - (-40)\) ?

F −76  
G 76  
H 4  
J −4
5. What is the value of $\frac{2}{21} - \frac{1}{3}$?

A $-\frac{5}{21}$
B $\frac{1}{18}$
C $\frac{5}{21}$
D $\frac{3}{7}$

6. Sarah wrote two decimals on the chalkboard. The decimals she wrote were $5.73$ and $-6.1$. What is the sum of the two decimals Sarah wrote?

F $11.63$
G $-11.63$
H $-0.37$
J $0.37$

7. Bruce drew a rectangle with a length of $8\frac{3}{4}$ inches and a width of 6 inches. Brandon drew a rectangle with dimensions that were $1\frac{1}{2}$ times the dimensions of Bruce’s rectangle. What is the length of Brandon’s rectangle?

A $10 \frac{1}{2}$ inches
B $12 \frac{1}{2}$ inches
C $9$ inches
D $13 \frac{1}{8}$ inches

8. What is the value of $-36 \div \left(-\frac{4}{9}\right)$?

F $-81$
G $81$
H $16$
J $-16$
9. What is the value of \( \frac{3}{4} + 2\frac{1}{2} \)?

A \( \frac{3}{4} \)
B \( \frac{1}{4} \)
C \( 1\frac{1}{2} \)
D \( \frac{3}{4} \)

10. Which of the following does NOT have a value of \(-5\)?

F \( \frac{1}{4} - 5 \frac{1}{4} \)
G \(-10 \div 2\)
H \(-20 \times 0.25\)
J \(-13 + 18\)
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 2
Proportionality
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 2
7.4A
Mini-Assessment 7.4A

1. David drove 232 miles in 4 hours and 319 miles in 5.5 hours. What is the constant rate of change?
   
   A 50 miles per hour
   B 56 miles per hour
   C 58 miles per hour
   D 62 miles per hour

2. The total cost of ears of corn at the grocery depends upon how many ears of corn you buy. Five ears cost $1.50, and 8 ears cost $2.40. What is the constant rate of change?
   
   F $0.30
   G $0.90
   H $3.90
   J Not Here

3. The relationship between the cost of a corsage and the number of flowers in the corsage is shown below.

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<tr>
<td>5</td>
<td>$17.50</td>
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   Which statement is true about the information in the table?
   
   A The information in the table has a constant rate of change of 3.5.
   B The information in the table has a constant rate of change of 2.
   C The information in the table has a constant rate of change of 7.
   D The information in the table does not have a constant rate of change.

4. Kerry created a pattern with rectangles. Her first step contained 1 rectangle. The second step contained 3 rectangles. The third step contained 5 rectangles. What is the constant rate of change?
   
   F 3
   G 2
   H 5
   J 7
5. Look at the table below.

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</table>

What is the constant rate of change for the relationship shown in the table?

A 3
B 2
C 1
D $\frac{1}{3}$

6. Which table shows a constant rate of change of $3.25$?

<table>
<thead>
<tr>
<th></th>
<th>Cost of Ham Sandwiches</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>h</td>
</tr>
<tr>
<td></td>
<td>C</td>
</tr>
<tr>
<td>G</td>
<td>h</td>
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<td>C</td>
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<tr>
<td>H</td>
<td>h</td>
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<tr>
<td></td>
<td>C</td>
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<tr>
<td>J</td>
<td>h</td>
</tr>
<tr>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

7. Which table represents a situation with a rate of change of 5?

<table>
<thead>
<tr>
<th></th>
<th>x</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>y</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>x</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>y</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>10</td>
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<tr>
<td>C</td>
<td>x</td>
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<td>2</td>
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<tr>
<td></td>
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<td>D</td>
<td>x</td>
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<td>2</td>
<td>10</td>
<td>20</td>
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<td></td>
<td>y</td>
<td>0.2</td>
<td>0.4</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
8. Which equation represents a constant rate of change of 25?
   
   \[ F \quad x + 25 = y \]
   
   \[ G \quad 25x = y \]
   
   \[ H \quad x - 25 = y \]
   
   \[ J \quad 5x = y \]

9. What constant rate of change is shown in the graph below?

   \[ y \]

   \[ x \]

   \[ 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \]

   \[ 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \]

   \[ A \quad 2 \]
   
   \[ B \quad 3 \]
   
   \[ C \quad 0.5 \]
   
   \[ D \quad 1 \]

10. A tank is filling with water. After 2 minutes, it contained 12 gallons. After 5 minutes, it contained 30 gallons. What is the constant rate of change?

   \[ F \quad 6 \text{ gallons per minute} \]
   
   \[ G \quad 10 \text{ gallons per minute} \]
   
   \[ H \quad 7 \text{ gallons per minute} \]
   
   \[ J \quad 5 \text{ gallons per minute} \]
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 2
7.6E
1. Becky is rolling a number cube with the numbers 1-6. What is the probability she will roll a 4 or a 5?

   A \( \frac{1}{2} \)
   B \( \frac{1}{3} \)
   C \( \frac{1}{6} \)
   D \( \frac{1}{4} \)

2. If the probability of an event occurring is 0.4, what is the probability of the event NOT occurring?

   F 0.4
   G 0.5
   H 0.6
   J 0.1

3. Sandy spun a spinner with 5 equal parts labeled 1-5. What is the probability she will NOT spin a 4?

   A 80%
   B 50%
   C 20%
   D 25%

4. A bag contains 9 red tiles, 10 blue tiles, and 6 green tiles. A tile is randomly drawn from the bag. Which statement is true?

   F The probability of drawing a red tile is 36% and the probability of NOT drawing a red tile is 64%.
   G The probability of drawing a blue tile is 30% and the probability of NOT drawing a blue tile is 70%.
   H The probability of drawing a green tile is 25% and the probability of NOT drawing a green tile is 75%.
   J The probability of drawing a red tile is greater than the probability of NOT drawing a green tile.
5. A nickel and a dime are flipped. What is the probability both coins will land tails up?

   A 20%
   B 40%
   C 25%
   D 50%

6. Marlee spins a spinner and rolls a 1-6 number cube. The spinner has 5 equal parts numbered 1-5. What is the probability Marlee will spin a 3 and roll a 3?

   F \frac{1}{15}
   G \frac{1}{20}
   H \frac{1}{30}
   J \frac{1}{2}

7. Marlee spins a spinner and rolls a 1-6 number cube. The spinner has 5 equal parts numbered 1-5. What is the probability she will spin an even number and roll an odd number?

   A \frac{2}{5}
   B \frac{3}{10}
   C \frac{1}{10}
   D \frac{1}{5}
8. Look at the spinner below. Allie spins the spinner 2 times.

What is the probability she will spin a * on the first spin and & on the second spin?

F \( \frac{1}{4} \)  
G \( \frac{1}{16} \)  
H \( \frac{1}{2} \)  
J \( \frac{1}{8} \)

9. Harrison placed 10 tiles numbered 1-10 in a bag. He plans to draw a tile from the bag. What is the probability he will draw a tile with a number larger than 6?

A 20%  
B 30%  
C 40%  
D 50%

10. Look at the diagram below. It represents a 6-by-6 foot board. A point is randomly chosen from the board.

What is the probability that the point will be in an unshaded area?

F \( \frac{3}{4} \)  
G \( \frac{1}{36} \)  
H \( \frac{1}{3} \)  
J \( \frac{2}{3} \)
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 3
Expressions, Equations, and Relationships
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 3
7.10A
7.10A Mini-Assessment

1. Jordan has 9 dimes and some quarters in her pocket. The value of her coins is $3.65. Which equation can be used to find the number of quarters, \( q \), Jordan has in her pocket?

   A \( 90 + q = 365 \)
   B \( 90 + 25q = 365 \)
   C \( 90 + 25q = 3.65 \)
   D \( (90 + 25)q = 365 \)

2. Ms. Holly had a gift card with a $365 balance. She bought several CDs that cost $18 each. After the purchase, her gift card balance was $185. Which equation can be used to determine the number of CDs, \( d \), she purchased?

   F \( 365 - 18d = 185 \)
   G \( 365 + 18d = 185 \)
   H \( 18d - 365 = 185 \)
   J \( 365 - 18 - d = 185 \)

3. A carpenter had two pieces of lumber that totaled 55 feet in length. The shorter piece was 12 feet shorter than the longer piece. Which equation can be used to find the length of the longer piece, \( x \)?

   A \( x + 12 + x = 55 \)
   B \( x - 12 = 55 \)
   C \( x - 12 + x = 55 \)
   D \( x - 12 - x = 55 \)

4. Sarah needs to buy 3 identical shirts to wear to work. She has a $15 gift certificate. Including using the gift certificate, she can spend no more than $80. Which inequality can be used to determine the possible costs for a shirt?

   F \( 3s + 15 \leq 80 \)
   G \( 3(s + 15) \leq 80 \)
   H \( 3s + 15 \geq 80 \)
   J \( 3(s + 15) \geq 80 \)
5. William has $7.50 to spend at the pretzel shop. A large pretzel costs $1.25 and a soft drink costs $0.90. He buys one drink and \( p \) pretzels. Which inequality can be used to find the number of pretzels William can buy?

A \[ 1.25 + 0.9p \leq 7.5 \]
B \[ 1.25p - 0.9 \leq 7.5 \]
C \[ 1.25p + 0.9 \geq 7.5 \]
D \[ 1.25p + 0.9 \leq 7.5 \]

6. Washington Middle School wants to collect more than 1,300 cans of food for a local charity. So far, they have collected 762 cans. Which inequality can be used to determine the number of cans, \( n \), they need to collect each day for the next 4 days to meet their goal?

F \[ 762 + 4n > 1300 \]
G \[ 762 + 4n < 1300 \]
H \[ 762 + n > 1300 \]
J \[ (762 + 4)n > 1300 \]

7. Look at the drawing below.

Which equation can be used to determine the value of \( x \)?

A \[ 2x + 10 = 46 \]
B \[ 2x + 10 + 46 = 180 \]
C \[ 2x + 10 + 46 = 90 \]
D Not Here
8. Look at the triangle shown below.

\[
\begin{array}{c}
\text{107°} \\
(2x - 5)° \\
x°
\end{array}
\]

Which equation can be used to find the value of \( x \)?

F \( x + 2x - 5 = 107 \)

G \( 107 + 2x - 5 = 180 \)

H \( 107 + 2x - 5 + x = 180 \)

J \( x + 2x - 5 = 180 \)

9. A rectangle has a perimeter greater than 300 meters. The width of the rectangle is 45 meters. Which inequality can be used to find the possible values of the length of the rectangle, \( x \)?

A \( x + 45 > 300 \)

B \( 2x + 90 < 300 \)

C \( 2x + 90 > 300 \)

D \( 2x + 45 > 300 \)

10. At the local coffee shop they sell a reusable mug for $6. If you use the mug for a refill, the refill costs $1.30. Last month Jason spent $29.40 for the mug and refills. Which equation can be used to determine the number of refills, \( r \), Jason purchased last month?

F \( 6 + 1.30r = 29.40 \)

G \( 6r + 1.30 = 29.40 \)

H \( 6 + r + 1.30 = 29.40 \)

J \( 1.30r = 29.40 \)
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGROY 3
7.11A
Mini-Assessment 7.11A

1. An inequality is modeled below. ○ represents $x$, _ represents −1, and + represents 1.

What is the solution for the inequality?

A $x < 1$
B $x < 2$
C $x < −1$
D $x < −2$

2. A larger number is 30 more than a smaller number $x$. The larger number is 50. What is the smaller number?

F 20
G 30
H 10
J 15

3. The model represents the equation $2x − 1 = −7$

What value of $x$ makes $2x − 1 = −7$ true?

A $x = −3$
B $x = −2$
C $x = −4$
D $x = 3$
4. Which number line best represents the solution for the equation modeled below?

\[ x + x + x = 1 + 1 + 1 \]

- **F**

- **G**

- **H**

- **J**

5. The model represents the equation \( 4x + 4 = 12 \).

What value of \( x \) makes the equation true?

- **A** 1
- **B** 2
- **C** 3
- **D** 4
6. The model represents the equation $3x - 2 < 4$.

What is the solution set for this inequality?

- **F** $x < -3$
- **G** $x < -2$
- **H** $x < 6$
- **J** $x < 2$

7. The equation $-2x + 6 = 4x$ is modeled below.

Which is the first step in solving the equation for $x$?

- **A** Remove two $x$ squares from both sides
- **B** Add four $x$ squares to each side
- **C** Add two $x$ squares to each side
- **D** Add two $-1$ squares to each side

8. In a coin collection, the number of nickels is 8 more than twice the number of quarters. If the collection has 42 nickels, how many quarters are in the collection?

- **F** 15
- **G** 14
- **H** 17
- **J** 25
9. Which of the following is the solution for the inequality below?

\[ 3x - 4 < -19 \]

A. \( x < -5 \)  
B. \( x < -22 \)  
C. \( x < -4 \)  
D. \( x > -4 \)

10. The sum of the length and width of a rectangle is more than 15 units. The length is 3 units more than the width, \( x \). Which model and solution is correct for this situation?

F. \( x + x + 3 > 15 \); solution \( x > 12 \)  
G. \( x + 3 > 15 \); solution \( x > 12 \)  
H. \( x + x + 3 > 15 \); solution \( x > 6 \)  
J. \( x + x + 3 > 15 \); solution \( x > 9 \)
GRADE 7
Mini-Assessments
STAAR Format
TEKS Categories

TEKS CATEGORY 4
Measurement and Data
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 4
7.12A
1. The box plots below compare the number of points two basketball players scored per game over 25 games last season.

![Box plots for Player A and Player B](image)

Which statement is supported by the information in the box plots above?

A. Player A has a larger spread in the points he scored than Player B.
B. Player A has a larger center than Player B.
C. Player A scored points in all 25 games but Player B did not.
D. Player A and Player B each scored 36 points in at least one of the 25 games.

2. The box plots below compare the heights of the girls and the boys in the seventh grade at Heizor Middle School.

![Box plots for Boys' and Girls' Heights](image)

Which statement is true based on the information in the box plots above?

F. The boys’ heights have a center height about 10 inches larger than the girls’ heights.
G. The boys’ heights have a larger spread than the girls’ heights.
H. The whiskers on the box plot of the girls’ heights are more varied in length than the whiskers on the box plot of the boys’ heights.
J. At least one boy and one girl are 72 inches tall.
3. The box plots below shows the scaled math scores on a standardized math test for grades 7 and 8 students.

Which statement is NOT supported by the information in the box plots above?

A Grade 7 has a larger spread in the points they scored than Grade 8 had in the points they scored.
B Grade 8 has a center of 12 and Grade 7 has a center of 11.
C Grade 8 has a minimum score of 6 and Grade 7 has a minimum score of 3.
D Grade 8 has an interquartile range of 7 and Grade 7 has an interquartile range of 6.

4. The box plots below show the number of community service hours by each student in Ms. Alonzo’s and Mr. Lee’s homeroom classes.

Which statement is NOT supported by the information in the box plots above?

F The box plot for Ms. Alonzo’s students has a center of 7 hours and the box plot for Mr. Lee’s students has a center of 6 hours.
G The box plot for Ms. Alonzo’s students has a larger interquartile range than the box plot for Mr. Lee’s students.
H The whiskers on the box plot for Ms. Alonzo’s students are more varied in length than the whiskers on the box plot for Mr. Lee’s students.
J At least one student in Ms. Alonzo’s class did 10 hours of community service.
5. The dot plots below show the numbers of hours students in two homerooms spent on homework each week.

Which statement is supported by the information in the dot plots above?

A  Homeroom A has a larger spread in hours they spend on homework than Homeroom B has in the hours they spend on homework.

B  Homeroom A has a center of 3 and Homeroom B has a center of 4.

C  Homeroom A has more students spending 2, 3, or 4 hours on homework than Homeroom B had students spending 4, 5, or 6 hours on homework.

D  Homeroom A had more than half of their students spending 4 or more hours on homework and Homeroom B had more than two-thirds of their students spending 4 or more hours on homework.

6. Ms. Mason asked two of her classes how many library books they read over the summer. The dot plots show the numbers of books read by the students in the two classes

Which statement is true based on the information in the dot plots above?

F  The dot plot for Class 1 has a center of 6 books and the dot plot for Class 2 has a center of 6 books.

G  The dot plot for Class 1 has a larger spread the dot plot for Class 2.

H  The most common number of books read in either Class 1 or Class 2 is 7 books.

J  The same number of students in Class 1 as in Class 2 read 5 or less books.
7. The dot plots below show the numbers of minutes a random group of Grade 6 and Grade 7 students spend on personal hygiene in the mornings.

Which statement is supported by the information in the dot plots above?

A Grade 7 has a larger spread in the number of minutes they spend on personal hygiene than Grade 6 has in the number of minutes they spend on personal hygiene.

B Grade 7 has a center of 20 minutes and Grade 6 has a center of 30 minutes.

C Grade 6 has more students spending 15 to 25 minutes on personal hygiene than Grade 7 has students spending 15 to 25 minutes on personal hygiene.

D Grade 6 has more than half of the students spending 25 or more minutes on personal hygiene while Grade 7 has more than half of the students spending 30 or more minutes on personal hygiene.

8. The librarian is gathering data on the number of pages students can read in 30 minutes. The dot plots show the numbers of pages read by the two groups.

Which statement is true based on the information in the dot plots above?

F The dot plots for Group 1 and Group 2 have centers of 23 pages.

G The dot plot for Group 1 has a larger spread the box plot for Group 2.

H The most common number of pages read in Group 2 is 25 pages.

J The same number of students in Group 1 read 20 or 21 pages as the number of students in Group 2 that read 20 or 21 pages.
9. Compare the two box plots below that show the results of a final exam in two of Mrs. Leeward’s classes.

Final Exam Scores

Which statement is true based on the box plots?

A  Class 2 has a larger spread in their final exam scores than Class 1 has in their final exam scores.
B  Class 2 has a center score of 85 and Class 1 has a center score of 80.
C  Class 1 has a minimum score of 50 and Class 2 has a maximum score of 100.
D  Class 2 has a larger interquartile range than Class 1.

10. Compare the two box plots below.

Which statement is true based on the box plots?

F  Plot 2 has a larger spread than Plot 1.
G  Plot 1 and Plot 2 have a center score of 60.
H  Plot 1 has a minimum of 30 and Plot 2 has a maximum score of 75.
J  Plot 2 has a larger interquartile range than Plot 1.
GRADE 7
Mini-Assessments
STAAR Format
TEKS Categories

TEKS CATEGORY 5
Personal Financial Literacy
GRADE 7
Mini-Assessments
STAAR Format

TEKS CATEGORY 5
7.13A
1. Mr. Barrett bought a new battery for his car. The battery cost $72. Since batteries are a taxable item, he had to pay a sales tax of 7.5%. What was the total cost of the battery in dollars and cents?

Record your answer on the grid below. Be sure to use the correct place value.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tbody>
</table>

2. Mr. Lucas bought a new lounge chair for his game room. The one he chose was $425. He had to pay a sales tax of 8.2%. What was the amount of sales tax he paid on the chair?

F $24.90  
G $44.30  
H $34.85  
J Not Here

3. The tax table for a single person for taxable income between $36,000 and $36,250 is shown below

<table>
<thead>
<tr>
<th>If Form 1040 line 43 (taxable income)-</th>
<th>And you are single</th>
</tr>
</thead>
</table>
| At least $36,000                        | But less than $36,050 | Your tax is-
| $36,000                                | $36,050             | $4,958 |
| $36,050                                | $36,100             | $4,965 |
| $36,100                                | $36,150             | $4,973 |
| $36,150                                | $36,200             | $4,980 |
| $36,200                                | $36,250             | $4,988 |

Mr. Jimenez has taxable earnings this year of $36,189. He paid $3,825 in withholding taxes from his earnings. How much more will he need to pay in income taxes based on the tax table above?

A $4,980  
B $1,155  
C $1,420  
D $925
4. The tax table for a married couple filing jointly for taxable income between $68,400 and $68,650 is shown below.

<table>
<thead>
<tr>
<th>If Form 1040 line 43 (taxable income)</th>
<th>And you are married, filing jointly</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least $68,400</td>
<td>But less than $68,450</td>
</tr>
<tr>
<td>$68,450</td>
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<tr>
<td>$68,500</td>
<td>$68,550</td>
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<td>$68,550</td>
<td>$68,600</td>
</tr>
<tr>
<td>$68,600</td>
<td>$68,650</td>
</tr>
</tbody>
</table>

The Davis family has a combined taxable income of $68,457. Their combined withholding this year was $11,376. Which statement is true based on the table above?

F They have overpaid with their withholding so they will receive a refund of $997.
G They have overpaid with their withholding so they will receive a refund of $1,997.
H After reducing their tax amount for their withholding, they will still owe $1,997.
J After reducing their tax amount for their withholding, they will still owe $997.

5. Sandra bought a new coat for $49.99 and 3 skirts for $24.99 each. If the sales tax rate is 7%, to the nearest cent what is the amount of sales tax Sandra will owe on the purchase?

A $151.90
B $11.36
C $7.52
D $8.75

6. Mr. Autry bought a hat for $99.90. He also bought a pair of boots for $89.90. What was the total cost of the hat and boots to the nearest cent, including an 8% sales tax?

Record your answer on the grid below. Be sure to use the correct place value.
7. In New City, Texas, the sales tax rate is 8.15%. How is this percent represented as a decimal?

A 8.15  
B 0.815  
C 0.0815  
D 0.00815

8. James bought a new digital camera for $175. He had to pay a sales tax of 7.2%. What was the total cost of the camera?

F $183.40  
G $187.60  
H $11.36  
J $12.60

9. The tax table for taxable income between $72,000 and $72,300 is shown below.

<table>
<thead>
<tr>
<th>If Form 1040 line 43 (taxable income) is-</th>
<th>And you are single</th>
<th>And you are married, filing jointly</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least $72,000</td>
<td>But less than $72,050</td>
<td>Your tax is- $13,935</td>
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<tr>
<td>$72,050</td>
<td>$72,100</td>
<td>$13,948</td>
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<tr>
<td>$72,250</td>
<td>$72,300</td>
<td>$13,998</td>
</tr>
</tbody>
</table>

Mr. and Mrs. Soto have taxable earnings this year of $72,279. They paid $9,345 in withholding taxes from his earnings and they file jointly. How much more will they need to pay in income taxes based on the tax table above?

A $4,328  
B $281  
C $604  
D Not Here

10. If an item cost $41.04, including an 8% sales tax, what was the cost of the item before taxes?

F $36  
G $38  
H $39  
J $37
GRADE 7
STAAR Format
Periodic Assessments

Containing Multi-TEKS
GRADE 7
STAAR Format
Periodic Assessment 1
TEKS/STAAR Periodic Assessment

Make 1 copy of the Periodic Assessment for each student. Students answer these questions individually. Record class performance on the Class Profile Sheet and individual student performance on the Individual Student Profile Sheet.

<table>
<thead>
<tr>
<th>Answer Key</th>
<th>STAAR Category/TEKS</th>
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</thead>
<tbody>
<tr>
<td>1. C</td>
<td>Category 2/7.4D</td>
</tr>
<tr>
<td>2. G</td>
<td>Category 2/7.4A</td>
</tr>
<tr>
<td>3. B</td>
<td>Category 1/7.6A</td>
</tr>
<tr>
<td>4. 15</td>
<td>Category 3/7.11A</td>
</tr>
<tr>
<td>5. C</td>
<td>Category 2/7.10A</td>
</tr>
<tr>
<td>6. F</td>
<td>Category 3/7.5A</td>
</tr>
<tr>
<td>7. A</td>
<td>Category 1/7.6A</td>
</tr>
<tr>
<td>8. G</td>
<td>Category 1/7.6E</td>
</tr>
<tr>
<td>9. C</td>
<td>Category 1/7.6I</td>
</tr>
<tr>
<td>10. H</td>
<td>Category 4/7.13A</td>
</tr>
<tr>
<td>11. B</td>
<td>Category 4/7.12A</td>
</tr>
<tr>
<td>12. G</td>
<td>Category 3/7.9A</td>
</tr>
<tr>
<td>13. D</td>
<td>Category 4/7.13A</td>
</tr>
<tr>
<td>14. G</td>
<td>Category 2/7.11B</td>
</tr>
<tr>
<td>15. C</td>
<td>Category 1/7.6E</td>
</tr>
<tr>
<td>16. G</td>
<td>Category 2/7.11A</td>
</tr>
<tr>
<td>17. D</td>
<td>Category 4/7.3A</td>
</tr>
<tr>
<td>18. J</td>
<td>Category 3/7.11A</td>
</tr>
<tr>
<td>19. B</td>
<td>Category 4/7.5C</td>
</tr>
<tr>
<td>20. 828</td>
<td>Category 3/7.13A</td>
</tr>
</tbody>
</table>
1. A customer bought 7.5 pounds of apples from a local produce market. How many ounces of apples did the customer buy?
   A  112 ounces
   B  128 ounces
   C  120 ounces
   D  Not here

2. A table is shown below.

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

Which statement is true about the data in the table?

F  The rate of change for the data in the table is 3.
G  As the $x$-value increases 1 unit, the $y$-value increases 2 units.
H  As the $x$-value increases 3 units, the $y$-value increases 1 unit.
J  The rate of change for the data in the table is 1.

3. Mary rolled three 1-6 cubes at the same time. She rolled 5, 1, and 6. Which list shows all the possible three-digit numbers she can create using all three digits she rolled?
   A  516; 615; 165
   B  516; 615; 165; 156; 561; 651
   C  516; 615; 165
   D  615; 156; 561; 165; 651
4. In a coin collection, the number of dimes is 6 more than twice the number of nickels. If the collection has 36 dimes, how many nickels are in the collection?

Record your answer on the grid below. Be sure to use the correct place value.

5. Charlie has more than 50 game coins. Charlie has 8 more than 3 times as many game coins as Steven. If x represents the number of game coins Steven has, which inequality can be used to determine the possible number of game coins Steven has?

A. \(8 + 3x < 50\)
B. \(3x - 8 > 50\)
C. \(3x + 8 > 50\)
D. \(8x + 3 > 50\)

6. Which statement is true?

F. All squares are similar because they all have corresponding sides proportional and all 4 angles are congruent right angles.
G. All right triangles are similar because they all have a right angle.
H. All isosceles triangles are similar because they all have a pair of base angles congruent.
J. All rectangles are similar because they all have 4 right angles.
7. Leo’s Deli sells ham and turkey sandwiches. They have three types of bread to choose from: wheat, white, and rye. Which tree diagram shows all the combinations of the meat and types of bread sold at Leo’s Deli?

A

B

C

D


8. A bag contains 8 yellow cubes, 7 blue cubes, and 5 red cubes. If you select a cube at random, what is the probability the cube will NOT be blue or red?

F 35%
G 40%
H 75%
J 25%

9. A jawbreaker candy machine has 25 red jawbreakers, 30 green jawbreakers, 15 yellow jawbreakers, and 20 blue jawbreakers. If Loretta puts 1 coin in the machine and gets 1 jawbreaker, what is the probability the jawbreaker is NOT green?

A 2/5
B 1/3
C 2/3
D 1/60
10. Leticia bought a new tablet for $425. She had to pay a sales tax of 8%. What was the amount of sales tax she paid on the tablet?

F $405
G $30
H $34
J $20

11. The dot plots below show the number of hours students in two homerooms spent on reading each week.

Which statement is supported by the information in the dot plots above?

A In comparing the shape of the data for the two dot plots, Homeroom A has more students who spend more than 3 hours on reading than Homeroom B.
B In comparing the shape of the data for the two dot plots, Homeroom A has twice as many students who spend 2 or less hours on reading as Homeroom B.
C In comparing the spread of the data, Homeroom A has a larger spread than Homeroom B.
D In comparing the centers of the data, Homeroom A has a center of 3 hours and Homeroom B has a center of 5 hours.

12. A block of ice was in the shape of a rectangular prism. The ice block had a volume of 9,600 cubic inches. After being in a warm area, the size of the block was 18 inches by 12 inches by 20 inches. What was the volume of the ice that melted?

F 4,230 in.³
G 5,280 in.³
H 6,280 in.³
J 13,920 in.³
13. The tax table for taxable income between $36,000 and $36,300 is shown below.

<table>
<thead>
<tr>
<th>If Form 1040 line 43 (taxable income) is-</th>
<th>And you are single</th>
<th>And you are married filing jointly</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least $36,000 but less than $36,050</td>
<td>$4,958</td>
<td>$4,511</td>
</tr>
<tr>
<td>At least $36,050 but less than $36,100</td>
<td>$4,965</td>
<td>$4,519</td>
</tr>
<tr>
<td>At least $36,100 but less than $36,150</td>
<td>$4,973</td>
<td>$4,526</td>
</tr>
<tr>
<td>At least $36,150 but less than $36,200</td>
<td>$4,980</td>
<td>$4,534</td>
</tr>
<tr>
<td>At least $36,200 but less than $36,250</td>
<td>$4,988</td>
<td>$4,541</td>
</tr>
<tr>
<td>At least $36,250 but less than $36,300</td>
<td>$4,998</td>
<td>$4,949</td>
</tr>
</tbody>
</table>

Mr. Lara’s family has taxable earnings this year of $36,263. They have paid $4,745 in withholding taxes from their earnings. Mr. Lara and his wife file jointly. Have they paid enough in withholding for their taxes?

A  No, they will need to pay an additional $204 to the federal government.
B  No, they will need to pay an additional $189 to the federal government.
C  Yes, they will get a refund check for $189.
D  Yes, they will get a refund check for $204.

14. For which equation is \( x = 4.5 \) a solution?

F  \( 2x + 0.5 = 11 \)
G  \( 2x - 2.5 = 6.5 \)
H  \( 4x - 3 = 12 \)
J  \( -2x - 4 = 13 \)

15. A spinner has 5 equal sections labeled \(-1, 0, 3, -2,\) and \(4\). If the spinner is spun one time, what is the probability it will land on an integer that is a whole number?

A  40%
B  25%
C  60%
D  75%
16. If a square represents $x$ and a circle represents 1, which of the models below best represent $2x + 3 \leq 8$?

- **F** \[ \square + \circ \geq \circ \circ \circ \circ \circ \circ \circ \]
- **G** \[ \square + \circ \leq \circ \circ \circ \circ \circ \circ \circ \]
- **H** \[ \square + \circ \geq \circ \circ \circ \]
- **J** \[ \square + \circ \leq \circ \circ \circ \circ \circ \circ \]

17. Which statement is NOT true?

- **A** $5 - (-8) = 13$
- **B** $-2\frac{1}{2} \times \frac{4}{5} = -2$
- **C** $-6 + 3\frac{1}{3} = -2\frac{2}{3}$
- **D** $-16 \div 4 = 4$

18. A carpenter had two pieces of lumber that totaled more than 40 feet in length. The shorter piece was 10 feet shorter than the longer piece. Which inequality can be used to find the range of lengths of the longer piece, $x$?

- **F** $x - 10 + x < 40$
- **G** $x - 10 > 40$
- **H** $x + 10 + x > 40$
- **J** $x - 10 + x > 40$
19. Quadrilateral $MNOP$ is similar to quadrilateral $SRUT$.

Which proportion can be used to find the value of $x$?

A. $\frac{12}{x} = \frac{8}{14}$
B. $\frac{x}{14} = \frac{8}{12}$
C. $\frac{14}{x} = \frac{8}{12}$
D. $\frac{14}{8} = \frac{12}{x}$

20. The Williams family has a monthly net income of $3,600. They budget 18% for household expenses and 5% for savings. What amount do they budget for these two categories?

Record your answer on the grid below. Be sure to use the correct place value.