5th Grade Released STAAR Test Questions Organized by TEKS

Includes both 2015 and 2016 Released Tests, assessed TEKS only
how to use this resource

The materials contained in this packet at Released STAAR Test questions from the Texas Education Agency's website. The test questions are organized by standard, so that teachers can align instruction to the STAAR test. Remember that all standards are required to be taught, even though not every standard is included on the test. This resource is not to be used to “teach to the test” but to help align instruction to the test. Please use this to review how the TEK is tested, so that you can incorporate STAAR-like review and questions throughout your instructional year, with whatever program and instructional delivery model you use.

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Email: Meridith.meyer@fwisd.org
What’s Included

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Included is the Guide: List of TEKS in order, with clickable menu, pages, and questions with the answers.

(2) Number and Operations. The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value. The student is expected to:
(A) represent the value of digit in decimals through the thousandths using expanded notation and numerals.
(B) compare and order two decimals to thousandths and represent comparisons using the symbols >, <, =.
(C) round decimals to tenths or hundredths.

Each TEK includes the front page with all standards and student expectations listed. Bolded student expectations notify you of Readiness Standards.

Pages with the questions include the header with the TEK number and SE letter. Readiness Standards are included on those title pages only.
# 5th Grade Released Test by TEKS

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(2) Number and Operations. The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value. The student is expected to:

(A) represent the value of the digit in decimals through the thousandths using expanded notation and numerals;

(B) compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or =; and

(C) round decimals to tenths or hundredths
5. A bank received a check for two thousand, six hundred nine dollars and seventy-five cents. How is this number written in expanded notation?

A. \((2 \times 1,000) + (6 \times 100) + (9 \times 10) + (7 \times 0.01) + (5 \times 0.01)\)

B. \((2 \times 1,000) + (6 \times 100) + (9 \times 1) + (7 \times 0.1) + (5 \times 0.01)\)

C. \((2 \times 1,000) + (6 \times 10) + (9 \times 1) + (7 \times 1) + (5 \times 1)\)

D. \((2 \times 1,000) + (6 \times 100) + (9 \times 1) + (7 \times 0.01) + (5 \times 0.001)\)
5.2b: Readiness Standard

1. The table shows the masses of four rocks.

<table>
<thead>
<tr>
<th>Rock</th>
<th>Mass (kg)</th>
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</thead>
<tbody>
<tr>
<td>S</td>
<td>0.429</td>
</tr>
<tr>
<td>T</td>
<td>0.438</td>
</tr>
<tr>
<td>U</td>
<td>0.43</td>
</tr>
<tr>
<td>V</td>
<td>0.483</td>
</tr>
</tbody>
</table>

Which number sentence correctly compares the masses of two of the rocks?

A. 0.429 > 0.438
B. 0.438 < 0.483
C. 0.429 > 0.43
D. 0.438 = 0.43

8. The table shows the time in seconds it took four swimmers to complete a race.

<table>
<thead>
<tr>
<th>Swimmer</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (seconds)</td>
<td>26.15</td>
<td>26.5</td>
<td>26.1</td>
<td>26.05</td>
</tr>
</tbody>
</table>

Which inequality correctly compares two of these race times?

F. 26.5 > 26.05
G. 26.15 > 26.5
H. 26.1 < 26.05
J. 26.15 < 26.1
23 Joshua compared the values of these decimals.

\[
\begin{array}{cccc}
0.06 & 0.6 & 0.006 & 0.060 \\
\end{array}
\]

Which statement correctly compares two of these numbers?

A 0.6 < 0.06
B 0.006 > 0.6
C 0.6 = 0.06
D 0.060 = 0.06

34 Books in a library are arranged by their Dewey decimal number. The Dewey decimal numbers for five books are shown in the picture.

\[
\begin{array}{c}
419.018 \\
417.97 \\
417.309 \\
418.537 \\
418.63 \\
\end{array}
\]

Lana will put these five books in order from the least number to the greatest number. Which book will be in the fourth position?

F 419.018
G 417.97
H 418.537
J 418.63
1. A computer rounded the number 129.257 to the nearest hundredth. What is this number rounded to the nearest hundredth?

A  100
B  129.30
C  130
D  129.26
(3) Number and Operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy. The student is expected to

(A) estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division;

(B) multiply with fluency a three-digit number by a two-digit number using the standard algorithm;

(C) solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm;

(D) represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models;

(E) solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers;

(F) represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models;

(G) solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm;

(H) represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations;

(I) represent and solve multiplication of a whole number and a fraction that refers to the same whole using objects and pictorial models, including area models;

(J) represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as 1/3 ÷ 7 and 7 ÷ 1/3 using objects and pictorial models, including area models;

(K) add and subtract positive rational numbers fluently, and

(L) divide whole numbers by unit fractions and unit fractions by whole numbers.
2 Mr. Márquez had 123 eggs in a refrigerator in his restaurant. He put 32 more cartons of eggs in the refrigerator. Each carton contained 18 eggs. Which of these is the best estimate of the number of eggs Mr. Márquez now has in his refrigerator?

F 600
G 400
H 700
J 900
27 A company makes 625 cell phone cases each day. How many cell phone cases does the company make in 31 days?

A  18,375  
B  1,490  
C  2,500  
D  19,375
33 Tara has a box of 908 beads for making bracelets. She wants to put 15 beads on each bracelet she makes. What is the greatest number of bracelets Tara can make with these beads?

A  61
B  70
C  60
D  68
4. The hundredths model in the figure is shaded to represent the multiplying of two numbers.

Which equation can be represented by the shaded parts of the model?

A. 80 \times 40 = 3,200
B. 0.08 \times 0.04 = 0.32
C. 0.80 \times 0.40 = 0.32
D. 0.08 \times 0.04 = 0.032

42. Marisela used this model to represent 1 whole.

Which model represents 1.8 \times 4?
5.3e: Readiness Standard

5  Denise spent $3.45 on snacks every day for 11 days. What is the amount of money Denise spent on these snacks?
   A  $379.50
   B  $14.45
   C  $37.95
   D  $6.90

9  Scott drank 3.5 bottles of water yesterday. Each bottle contained 1.2 pints of water. What was the number of pints of water Scott drank yesterday?
   A  4.7 pints
   B  4.2 pints
   C  4.1 pints
   D  42 pints

39  Freddy exercised 2.5 hours per day on 4 days last week. He burned 330 calories per hour while exercising. How many calories did Freddy burn by exercising last week?
   A  2,640 calories
   B  26,400 calories
   C  3,300 calories
   D  33,000 calories
6. The model is shaded to represent two and sixty-hundredths.

This model represents an equation.

Which equation is represented by this model?

A. $2.50 \times 5 = 12.5$
B. $2.60 \div 5 = 0.52$
C. $52 \times 5 = 260$
D. $2.06 \div 5 = 0.412$

10. Which model represents $1.2 \div 3$?

F

G

H

J
5.39: Readiness Standard

7  Anthony has a goal of saving $96.20. He will save the same amount each week for 13 weeks. How much will Anthony need to save each week in order to meet his goal?
   A  $7.40
   B  $7.52
   C  $7.04
   D  $7.31

4  A rope was 14.35 inches long. Megan cut the rope into 7 pieces of equal length. What was the length of each piece of rope in inches?
   F  2.5 in.
   G  2.35 in.
   H  2.05 in.
   J  2.55 in.

44 What is the quotient when 0.75 is divided by 5?
   F  4.25
   G  0.15
   H  3.75
   J  Not here
8 Mrs. Ali collected notebook paper from her students at the beginning of the school year. The model is shaded to show the fraction of this notebook paper that Mrs. Ali used in each of the three months.

First month

Second month

Third month

What fraction of the notebook paper Mrs. Ali collected was used during these three months?

A $\frac{3}{8}$

B $\frac{7}{8}$

C $\frac{3}{14}$

D $\frac{1}{8}$

6 Cara and Marcus shared a candy bar. The models are shaded to show the fraction of the candy bar each of them ate.

Cara

Marcus

What fraction of the candy bar did Cara and Marcus eat altogether?

F $\frac{11}{12}$

G $\frac{9}{16}$

H $\frac{1}{12}$

J $\frac{9}{24}$
5.3i

9  Weather delayed $\frac{4}{6}$ of the 24 flights departing from an airport. All the departing flights are listed in the chart.

<table>
<thead>
<tr>
<th>Departing Flights</th>
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<tbody>
<tr>
<td>Flight #48</td>
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<tr>
<td>Flight #112</td>
</tr>
<tr>
<td>Flight #23</td>
</tr>
<tr>
<td>Flight #12</td>
</tr>
<tr>
<td>Flight #17</td>
</tr>
<tr>
<td>Flight #65</td>
</tr>
</tbody>
</table>

How many flights departing from the airport were delayed by weather?

A  18
B  4
C  16
D  8

50 Which model represents $\frac{3}{5}$ of 15?

F

G

H

J
21 Which number line best models the expression $3 \div \frac{1}{3}$?

A

B

C

D
10 The regular price of a calculator is $12.30. Warren paid 75¢ less than the regular price for the calculator. He also paid $1.48 for a pad of paper. What is the total amount Warren paid for these two items?

A $13.03
B $14.03
C $14.53
D $13.83

18 Last month Jim drove his car 2,718.3 miles. That brought the car’s total mileage to 87,416 miles. What was the car’s total mileage before last month?

F 84,697.7 mi
G 85,302.7 mi
H 89,124.3 mi
J 90,134.3 mi
24. The table shows the population of three Texas counties. The population of Gray County is missing.

<table>
<thead>
<tr>
<th>County</th>
<th>Population</th>
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<tbody>
<tr>
<td>Anderson</td>
<td>58,308</td>
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<tr>
<td>Dallas</td>
<td>2,416,014</td>
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<tr>
<td>Brazos</td>
<td>197,632</td>
</tr>
<tr>
<td>Gray</td>
<td></td>
</tr>
</tbody>
</table>

The population of Gray County is 35,553 less than the population of Anderson County. What is the combined population of these four counties?

F. 2,694,709  
G. 2,707,507  
H. 2,695,209  
J. 2,765,815

35. Marsha bought a birthday card for $2.86 and a pen for $1.57. She paid with a $20 bill. How much change should Marsha have received?

A. $15.57  
B. $24.43  
C. $17.77  
D. $16.57
11 Malia had 15 lb of birdseed. She fed her birds $\frac{1}{5}$ lb of birdseed every day until all the birdseed was gone. For how many days did Malia feed the birdseed to her birds?

A 20 days  
B 3 days  
C 90 days  
D 75 days

13 Cyril put a total of $\frac{1}{6}$ lb of gravel into 6 fish tanks. He put the same amount of gravel into each tank. How many pounds of gravel did Cyril put into each fish tank?

A $\frac{6}{8}$ lb  
B $\frac{1}{6}$ lb  
C $\frac{1}{48}$ lb  
D $\frac{6}{48}$ lb

37 Amy cut 32 feet of chain into pieces that were each $\frac{1}{4}$ ft long. How many of these pieces did Amy have after cutting the chain?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.
(A) identify prime and composite numbers;

(B) represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity;

(C) generate a numerical pattern when given a rule in the form \( y = ax \) or \( y = x + a \) and graph;

(D) recognize the difference between additive and multiplicative numerical patterns given in a table or graph;

(E) describe the meaning of parentheses and brackets in a numeric expression;

(F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping;

(G) use concrete objects and pictorial models to develop the formulas for the volume of a rectangular prism, including the special form for a cube (\( V = l \times w \times h \), \( V = s \times s \times s \), and \( V = Bh \)), and

(H) represent and solve problems related to perimeter and/or area and related to volume.
20 Seth’s homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below.

\[ 6 \times 22 \]
\[ 11 \times 12 \]
\[ 3 \times 44 \]
\[ 2 \times 66 \]

Which of Seth’s factor pairs contains only composite numbers?

F 6 × 22
G 11 × 12
H 3 × 44
J 2 × 66
5.4b: Readiness Standard

12 Pedro ordered 24 boxes of baseballs. Each box contained 16 baseballs. Pedro used 8 of these baseballs during a game. Which equation can be used to find \( b \), the total number of these baseballs that Pedro did not use during the game?

A  \( b = (24 + 16) - 8 \)

B  \( b = (24 \times 16) - 8 \)

C  \( b = (24 - 16) \div 8 \)

D  \( b = (24 \times 16) + 8 \)

14 Mr. Anderson had 185 pieces of wood. He sold 25 pieces of wood to his neighbor and stacked the rest of the wood into piles around his house. Each pile of wood contained 40 pieces of wood. Which equation can be used to find \( p \), the number of piles of wood Mr. Anderson made?

F  \( p = (185 + 25) + 40 \)

G  \( p = (185 - 25) - 40 \)

H  \( p = (185 + 25) \times 40 \)

J  \( p = (185 - 25) \div 40 \)
30 The table shows the number of hats made at a factory during three weeks in February. The number of hats made in Week 4 is represented by \( n \).

<table>
<thead>
<tr>
<th>Week</th>
<th>Number of Hats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>562,937</td>
</tr>
<tr>
<td>2</td>
<td>607,822</td>
</tr>
<tr>
<td>3</td>
<td>492,375</td>
</tr>
<tr>
<td>4</td>
<td>( n )</td>
</tr>
</tbody>
</table>

The total number of hats made at the factory in February was 2,148,431. Which equation represents this situation?

- **F**  \( 2,148,431 = (562,937 + 607,822 + 492,375) + n \)
- **G**  \( 2,148,431 = (562,937 + 607,822 + 492,375) - n \)
- **H**  \( 2,148,431 = (562,937 + 607,822 + 492,375) \times n \)
- **J**  \( 2,148,431 = (562,937 + 607,822 + 492,375) \div n \)

41 This equation can be used to find \( b \), the number of dollars Mrs. Colton earned as a sales bonus last week.

\[
b = 429 - (39 \times 9)
\]

What was the amount of Mrs. Colton’s bonus?

- **A** $20
- **B** $78
- **C** $158
- **D** $138
5.4C: Readiness Standard

13 The ordered pairs for the points on the coordinate plane satisfy the equation $y = x + 3$.

Which of these tables shows other points that satisfy the equation $y = x + 3$?

A
\[
\begin{array}{c|c|c|c|c}
 x & 4 & 7 & 10 & 13 \\
\hline
 y & 6 & 9 & 12 & 15 \\
\end{array}
\]

B
\[
\begin{array}{c|c|c|c|c}
 x & 12 & 15 & 18 & 21 \\
\hline
 y & 9 & 12 & 15 & 18 \\
\end{array}
\]

C
\[
\begin{array}{c|c|c|c|c}
 x & 9 & 12 & 15 & 18 \\
\hline
 y & 12 & 15 & 18 & 21 \\
\end{array}
\]

D None of these

16 Which table could represent the equation $y = 0.1x$?

F
\[
\begin{array}{c|c}
 x & y \\
\hline
 5 & 50 \\
 10 & 100 \\
 15 & 150 \\
 20 & 400 \\
 40 & 400 \\
\end{array}
\]

H
\[
\begin{array}{c|c}
 x & y \\
\hline
 5 & 5.1 \\
 10 & 10.1 \\
 15 & 15.1 \\
 20 & 20.1 \\
 40 & 40.1 \\
\end{array}
\]

G
\[
\begin{array}{c|c}
 x & y \\
\hline
 5 & 0.5 \\
 10 & 1.0 \\
 15 & 1.5 \\
 20 & 2.0 \\
 40 & 4.0 \\
\end{array}
\]

J
\[
\begin{array}{c|c}
 x & y \\
\hline
 5 & 0.5 \\
 10 & 0.6 \\
 15 & 0.7 \\
 20 & 0.8 \\
 40 & 1.2 \\
\end{array}
\]
5.4c: Readiness Standard

32 Customers at a gift shop receive free stickers for every T-shirt they buy. The graph shows the relationship between $x$, the number of T-shirts customers buy, and $y$, the number of stickers customers receive.

Which table also represents this relationship?

<table>
<thead>
<tr>
<th>Gift Shop</th>
<th>Gift Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
</tr>
</tbody>
</table>

48 Students earned extra points on a science test for correctly answering a bonus question. The relationship between the students' original test score and their final test score, including the extra points, can be represented by the equation $y = x + 25$. Which table could represent this relationship?

<table>
<thead>
<tr>
<th>Science Test</th>
<th>Science Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>H</td>
</tr>
<tr>
<td>Original Test Score, $x$</td>
<td>Final Test Score, $y$</td>
</tr>
<tr>
<td>65</td>
<td>90</td>
</tr>
<tr>
<td>70</td>
<td>95</td>
</tr>
<tr>
<td>78</td>
<td>103</td>
</tr>
<tr>
<td>85</td>
<td>110</td>
</tr>
<tr>
<td>72</td>
<td>97</td>
</tr>
<tr>
<td>80</td>
<td>105</td>
</tr>
<tr>
<td>83</td>
<td>98</td>
</tr>
<tr>
<td>91</td>
<td>106</td>
</tr>
<tr>
<td>G</td>
<td>J</td>
</tr>
<tr>
<td>Original Test Score, $x$</td>
<td>Final Test Score, $y$</td>
</tr>
<tr>
<td>70</td>
<td>45</td>
</tr>
<tr>
<td>79</td>
<td>54</td>
</tr>
<tr>
<td>81</td>
<td>56</td>
</tr>
<tr>
<td>85</td>
<td>60</td>
</tr>
<tr>
<td>70</td>
<td>25</td>
</tr>
<tr>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>90</td>
<td>75</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
46 The points on the graph represent a numerical pattern.

Which statement about the pattern represented on the graph is true?

F  It is a multiplicative pattern because each y-coordinate has a higher value than the corresponding x-coordinate.

G  It is a multiplicative pattern because each x-coordinate is multiplied by 5 to create the corresponding y-coordinate.

H  It is an additive pattern because each y-coordinate has a higher value than the corresponding x-coordinate.

J  It is an additive pattern because each x-coordinate is increased by 4 to create the corresponding y-coordinate.
An expression is given.

\[ 3 \times (8 + 2) \div 2 \]

Which statement is true about the parentheses in this expression?

A. The parentheses indicate that \( 8 + 2 \) should be solved first.
B. The parentheses indicate that \( 8 + 2 \) should be solved last.
C. The parentheses indicate that \( 2 \div 2 \) should be solved last.
D. The parentheses indicate that \( 3 \times 8 \) should be solved first.
5.4f: Readiness Standard

3. What is the value of this expression?

\[ [36 + (3 \times 2)] ÷ 6 \]

A. 7
B. 37
C. 13
D. 42

25. At a clothing store, Zoey bought 2 shirts for $7.25 each and 2 pairs of jeans for $24 each. She used a coupon for $10 off the total price of the clothes. The discounted price of the clothes Zoey bought can be found using this expression.

\[ [2(7.25) + 2(24)] - 10 \]

What is the discounted price in dollars and cents of the clothes Zoey bought?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.
14 The base of a rectangular prism has a length of 15 inches and a width of 13 inches. What is the area of this base of the prism in square inches?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

17 Phoebe divided her rectangular vegetable garden into three sections, as shown in the drawing below.

- The potato section is a square with a side length of 7 meters.
- The carrot section is a square with a side length of 5 meters.

What is the area, in square meters, of the corn section of Phoebe’s garden?

A 10 square meters
B 14 square meters
C 84 square meters
D 35 square meters
31. Duane packed some books in a box shaped like a rectangular prism. The volume of the box is 168 cubic inches. Which model could represent Duane’s box?

A

10 in. 16 in.

8 in.

B

10 in.

4 in. 7 in.

C

14 in.

6 in.

D

3 in. 7 in.

43. A square has a perimeter of 20 centimeters and an area of 25 square centimeters. Use the ruler provided to measure the line segments below to the nearest centimeter. Which line segment could represent a side of this square?

A

B

C

D
(5) Geometry and Measurement. The student applies mathematical process standards to classify two-dimensional figures by attributes and properties. The student is expected to

(a) classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties.
5.5a: Readiness Standard

15 Alex filled out a graphic organizer about polygons. Here is a section of his graphic organizer.

Which shapes appear to be classified correctly?

A  Shapes 1 and 3 only  
B  Shapes 2 and 4  
C  Shapes 1, 2, and 3  
D  Shapes 1, 3, and 4

28 Rachel classified shapes based on the types of angles they had. The table shows her classifications.

<table>
<thead>
<tr>
<th>Angle Types</th>
<th>Right Angles Only</th>
<th>Acute Angles Only</th>
<th>Obtuse Angles Only</th>
<th>Both Acute and Obtuse Angles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape 1</td>
<td></td>
<td></td>
<td>Shape 3</td>
<td></td>
</tr>
<tr>
<td>Shape 2</td>
<td></td>
<td>Shape 4</td>
<td>Shape 5</td>
<td>Shape 7</td>
</tr>
<tr>
<td>Shape 3</td>
<td></td>
<td></td>
<td>Shape 6</td>
<td>Shape 8</td>
</tr>
</tbody>
</table>

Which shape was not classified correctly?

F  Shape 4
G  Shape 5
H  Shape 7
J  Shape 8
5.5a: Readiness Standard

47 In which table are the check marks placed in all the correct boxes?

<table>
<thead>
<tr>
<th>A</th>
<th>Quadrilateral</th>
<th>Rhombus</th>
<th>Polygon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
<tr>
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<tr>
<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>Quadrilateral</th>
<th>Rhombus</th>
<th>Polygon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
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<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>Quadrilateral</th>
<th>Rhombus</th>
<th>Polygon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>✔️</td>
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<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>Quadrilateral</th>
<th>Rhombus</th>
<th>Polygon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>✔️</td>
</tr>
<tr>
<td></td>
<td>✔️</td>
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<td>✔️</td>
</tr>
<tr>
<td></td>
<td>✔️</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>
(6) Geometry and Measurement. The student applies mathematical process standards to understand, recognize, and quantify volume. The student is expected to:

(A) recognize a cube with side length of one unit as a unit cube having one cubic unit of volume and the volume of a three-dimensional figure as the number of unit cubes \( (n \text{ cubic units}) \) needed to fill it with no gaps or overlaps if possible; and

(B) determine the volume of a rectangular prism with whole number side lengths in problems related to the number of layers times the number of unit cubes in the area of the base.
3 Rebekah is filling a cube-shaped box with small cubes. The volume of each of these cubes is 1 cubic centimeter. She has already put some of these cubes into the box, as shown in the model.

What is the total number of small cubes that will fit in the box?

A  729
B  81
C  36
D  27
Raymond used 42 cubes to build the first layer of a rectangular prism. The edge length of each cube was 1 inch. The finished prism had a total of 7 layers. What is the volume of Raymond's prism in cubic inches?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
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<td>7</td>
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<td>8</td>
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<td>8</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>
(7) Geometry and Measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement. The student is expected to solve problems by calculating conversions within a measurement system, customary or metric.
7 The lengths of two insects are given below.

- Ladybug: 10 millimeters
- Walking stick: 30 centimeters

What is the difference in length of these two insects in millimeters?

A 70 mm  
B 20 mm  
C 290 mm  
D 2,990 mm
(8) Geometry and measurement. The student applies mathematical process standards to identify locations on a coordinate plane. The student is expected to:

(A) describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point (0, 0); the $x$-coordinate, the first number in an ordered pair, indicates movement parallel to the $x$-axis starting at the origin, and the $y$-coordinate, the second number, indicates movement parallel to the $y$-axis starting at the origin;

(B) describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane, and

(C) graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table.
40 A student graphs a point that is represented by the ordered pair \((3, 0)\). In this ordered pair, what does the number 3 indicate?

F  The point is 3 units above 0 on the \(x\)-axis.

G  The point is 3 units above 0 on the \(y\)-axis.

H  The point is 3 units to the right of 0 on the \(y\)-axis.

J  The point is 3 units to the right of 0 on the \(x\)-axis.
The ordered pairs below represent three vertices of a trapezoid.

\[(2, 1), (4, 4), (4, 6)\]

Which ordered pair could represent the location of the fourth vertex of this trapezoid?

A. \((4, 5)\)
B. \((10, 9)\)
C. \((2, 9)\)
D. \((4, 1)\)
15 The ordered pairs below represent the location of four people.

Nathan (6, 5)  
Denise (9, 10)  
Wade (7, 0)  
Urvasi (1, 1)

Paula is located at (7, 7). Based on this information, which statement is true?

A  Paula is located 1 unit south and 2 units east from Nathan.
B  Paula is located 7 units east from Wade.
C  Paula is located 3 units south and 2 units west from Denise.
D  Paula is located 6 units west from Urvasi.
5.8C: Readiness Standard

26. A table of ordered pairs is shown.

<table>
<thead>
<tr>
<th>x</th>
<th>2 1/2</th>
<th>3 1/2</th>
<th>4 1/2</th>
<th>5 1/2</th>
<th>6 1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>y</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

Which graph represents these ordered pairs?
36 The ordered pairs below represent three vertices of a rhombus.

\[(4, 9), (6, 7), (4, 5)\]

Which ordered pair could represent the fourth vertex of this rhombus?

F \((7, 2)\)
G \((9, 7)\)
H \((2, 9)\)
J \((2, 7)\)
Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data. The student is expected to:

(A) represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots;

(B) represent discrete paired data on a scatterplot; and

(C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot.
17 The thicknesses of the boards Dennis used for a construction project are listed below. These measurements are in inches.

\[
\frac{1}{4}, \frac{3}{4}, \frac{1}{2}, \frac{3}{4}, \frac{1}{8}, 1, \frac{5}{8}, \frac{3}{4}, \frac{1}{2}
\]

Which dot plot represents these measurements?
The table shows the amount of time eight thunderstorms lasted and the amount of rainfall each thunderstorm produced.

<table>
<thead>
<tr>
<th>Amount of Time, $x$ (hours)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>4</th>
<th>3</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of Rainfall, $y$ (inches)</td>
<td>5</td>
<td>8</td>
<td>11</td>
<td>6</td>
<td>4</td>
<td>14</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Which scatterplot best represents the data?
The table shows the high temperatures and the numbers of snow cones sold at a snack bar on seven days.

<table>
<thead>
<tr>
<th>High Temperature (°F)</th>
<th>Number Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>92</td>
<td>25</td>
</tr>
<tr>
<td>85</td>
<td>30</td>
</tr>
<tr>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td>87</td>
<td>22</td>
</tr>
<tr>
<td>95</td>
<td>32</td>
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<tr>
<td>93</td>
<td>30</td>
</tr>
<tr>
<td>92</td>
<td>40</td>
</tr>
</tbody>
</table>

Which scatterplot best represents the data in the table?
5.9C: Readiness Standard

19 The frequency table shows the colors that fifth graders preferred for their school shirts.

<table>
<thead>
<tr>
<th>Color</th>
<th>Tally</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Blue</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Green</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Orange</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Purple</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

Based on the data in the table, how many students preferred the three colors that had the highest frequencies?

A 38  
B 91  
C 147  
D 105

19 The stem and leaf plot shows the scores of eight people at a dance contest.

Dance Contest Scores

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>899</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>9</td>
<td>57</td>
</tr>
</tbody>
</table>

What is the difference between the highest score and the lowest score?

A 2.8  
B 2.7  
C 2.9  
D 2.6
29. The dot plot shows the numbers of pets that the students in a class own.

Numbers of Pets Owned by Students

What fraction of the students in this class have two or more pets?

A. \( \frac{1}{3} \)

B. \( \frac{7}{24} \)

C. \( \frac{2}{3} \)

D. \( \frac{3}{8} \)
5.9c: Readiness Standard

The bar graph shows the numbers of bags of two brands of dog food that were sold at a store. One bar for Day 5 is missing from the graph.

The number of bags of Brand Y dog food sold on these five days was 175. Which bar represents the data for Day 5 for Brand Y?
Personal financial literacy. The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security. The student is expected to:

(A) define income tax, payroll tax, sales tax, and property tax;

(B) explain the difference between gross income and net income;

(C) identify the advantages and disadvantages of different methods of payment, including check, credit card, debit card, and electronic payments;

(D) develop a system for keeping and using financial records;

(E) describe actions that might be taken to balance a budget when expenses exceed income, and

(F) balance a simple budget.
20 Ms. Parvin pays a tax every year because she owns a house. Which term best describes this tax?

A  Income tax  
B  Payroll tax  
C  Sales tax  
D  Property tax  

45 A definition of a financial term is shown in the box.

A tax on retail products based on a set percentage of retail cost

Which term best fits this definition?

A  Income tax  
B  Payroll tax  
C  Property tax  
D  Sales tax
21 Which of these statements about gross income and net income is true?

A  Gross income is a tax on all income that a worker earns, and net income is a tax paid by an employer based on a worker's wages.

B  Gross income is a tax paid by an employer based on a worker's wages, and net income is a tax on all income that a person earns.

C  Gross income is the amount an employee is paid after deductions and taxes, and net income is the total amount an employee earns before deductions are applied.

D  Gross income is the total amount an employee earns before deductions are applied, and net income is the amount an employee is paid after deductions and taxes.
22 This month Mando’s expenses are greater than his income. What are two actions Mando can take in order to balance his budget?

A  Increase expenses and decrease income
B  Decrease expenses and decrease income
C  Decrease expenses and increase income
D  Increase expenses and increase income
23 Ms. Vonn’s monthly budget is shown in the chart. She receives two paychecks per month.

<table>
<thead>
<tr>
<th>Income</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work paycheck</td>
<td>House payment</td>
</tr>
<tr>
<td>$1,200</td>
<td>$900</td>
</tr>
<tr>
<td>Work paycheck</td>
<td>Car payment</td>
</tr>
<tr>
<td>$1,200</td>
<td>$350</td>
</tr>
<tr>
<td></td>
<td>Utilities $250</td>
</tr>
<tr>
<td></td>
<td>Groceries $250</td>
</tr>
<tr>
<td></td>
<td>Gas $200</td>
</tr>
<tr>
<td></td>
<td>Insurance $150</td>
</tr>
<tr>
<td></td>
<td>Retirement savings</td>
</tr>
<tr>
<td></td>
<td>$250</td>
</tr>
</tbody>
</table>

Ms. Vonn’s budget is balanced every month. How much is Ms. Vonn’s monthly car payment?

A $2,400  
B $300  
C $500  
D $2,100

22 So far this month Nancy has the expenses and income shown in the chart.

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothes $40</td>
<td>Lawn mowing $30</td>
</tr>
<tr>
<td>Food $60</td>
<td>Babysitting $50</td>
</tr>
<tr>
<td>Movie tickets $30</td>
<td>Car washing $25</td>
</tr>
<tr>
<td></td>
<td>Garage sale $35</td>
</tr>
</tbody>
</table>

Nancy wants to buy some music online but also have a balanced budget. Based on Nancy’s current budget, what is the greatest amount of money she can spend on music?

F $10  
G $35  
H $140  
J $5