Step Up to the TEKS
by GF Educators, Inc.

Sixth Grade Mathematics

2018 Released Items Analysis

Teacher: _____

Edition I

GF Educators

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Name: _____

Teacher: _____

Date: _____

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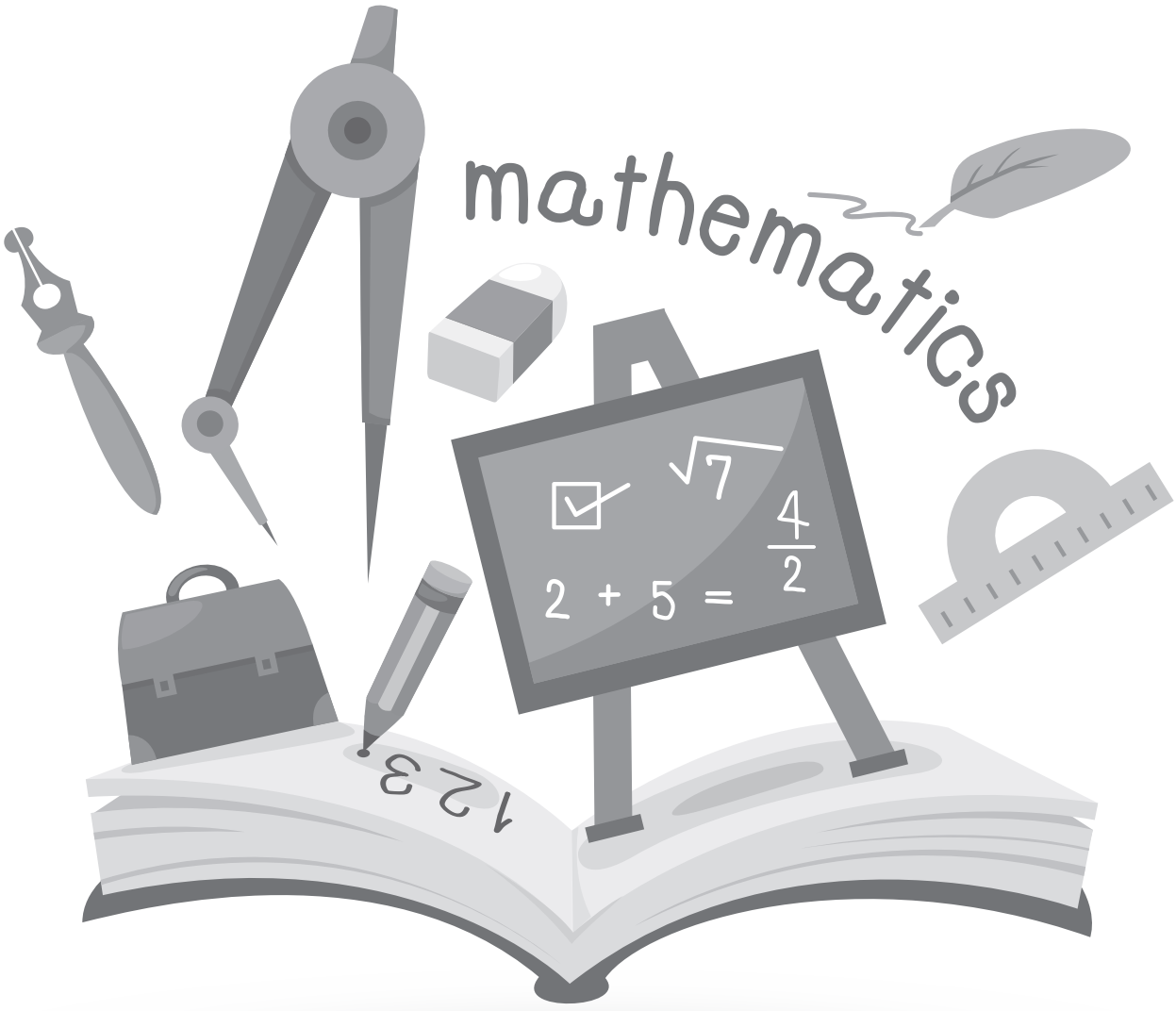
Instructional Analysis
2018 Released Items

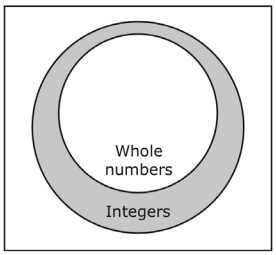


TEKS 6.2A Supporting Standard

classify whole numbers, integers, and rational numbers using a visual representation such as a Venn diagram to describe relationships between sets of numbers

ITEM

36 The Venn diagram shows the relationships among different sets of numbers.



Which number would be located in the shaded part of the diagram?

F -1.7
G -8
H $\frac{2}{3}$
J 10

Item Analysis	
Verb	Classify
Using or Including	Venn diagram
Concept	Rational Numbers
Process TEKS	**6.1B, 6.1E, 6.1F**

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TEKS 6.2B Supporting Standard

identify a number, its opposite, and its absolute value

ITEM

3 George wrote an integer. The opposite of George's integer is -53.

Which of these statements about George's integer must be true?

I. The integer is 53.
II. The integer has an absolute value of -53.
III. The integer is -53.
IV. The integer has an absolute value of 53.

A I and II
B II and IV
C II and III
D I and IV

Item Analysis	
Verb	Identify
Using or Including	NA
Concept	Number, Opposite, Absolute Value
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.2D Readiness Standard
order a set of rational numbers arising from mathematical and real-world contexts

ITEM

14 The table shows the portion of a day four students used to build a website.

Time Used

Student	Portion of Day
Jamail	29.4%
Andrew	37.6%
Ernesto	$\frac{7}{25}$
Blake	$\frac{3}{10}$

Which list shows the students in order from the greatest amount of time used to the least amount of time used?

F Andrew, Blake, Jamail, Ernesto
G Blake, Andrew, Jamail, Ernesto
H Ernesto, Blake, Andrew, Jamail
J Andrew, Jamail, Ernesto, Blake

Item Analysis	
Verb	Order
Using or Including	Real-World
Concept	Rational Numbers
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.2D Readiness Standard
order a set of rational numbers arising from mathematical and real-world contexts

ITEM

30 Which list shows the numbers in order from least value to greatest value?

F $-\frac{2}{5}$ -2.47 $-2\frac{1}{2}$ 5 $\frac{21}{4}$
G $-\frac{2}{5}$ -2.47 $-2\frac{1}{2}$ $\frac{21}{4}$ 5
H $-2\frac{1}{2}$ -2.47 $-\frac{2}{5}$ 5 $\frac{21}{4}$
J $-2\frac{1}{2}$ -2.47 $-\frac{2}{5}$ $\frac{21}{4}$ 5

Item Analysis	
Verb	Order
Using or Including	Mathematical
Concept	Rational Numbers
Process TEKS	**6.1B, 6.1F**

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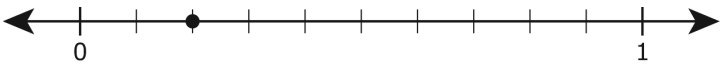
TEKS 6.4F Supporting Standard
represent benchmark fractions and percents such as 1%, 10%, 25%, 33 1/3%, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers

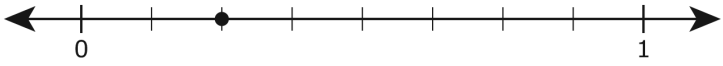
ITEM

6 An engine is operating at 25% of its full power. Which number line shows a point that represents 25%?

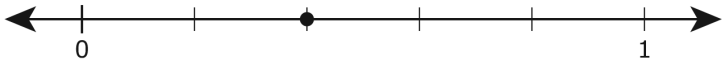
F



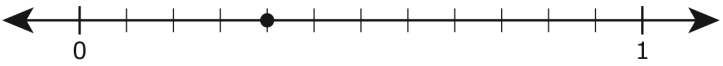
G



H



J



Item Analysis	
Verb	Represent
Using or Including	Number Lines
Concept	Benchmark Fractions
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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TEKS 6.4G Readiness Standard
generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money

ITEM

10 A waiter earned a 17% tip. What decimal is equivalent to 17%?

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

Item Analysis	
Verb	Generate
Using or Including	Money
Concept	Equivalent Forms Percents and Decimals
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.4G Readiness Standard
generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money

ITEM

23 Dolores spent $13.00 of the $20.00 in her wallet. Which decimal represents the fraction of the $20.00 Dolores spent?

A 0.35
B 0.13
C 0.07
D 0.65

Item Analysis	
Verb	Generate
Using or Including	Money
Concept	Equivalent Forms Percents and Decimals
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.7A Readiness Standard
generate equivalent numerical expressions using order of operations, including whole number exponents, and prime factorization

ITEM

12 Which expression is equivalent to $16 + 2 \cdot 36$?

F $2^4 + 2^3 \cdot 3^2$
G $2^3 + 2^3 \cdot 3^2$
H $2^4 + 2^2 \cdot 3^2$
J $2^3 + 2^2 \cdot 3^3$

Item Analysis	
Verb	Generate
Using or Including	Prime Factorization
Concept	Equivalent Numerical Expressions
Process TEKS	**6.1B, 6.1F**

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TEKS 6.7A Readiness Standard
generate equivalent numerical expressions using order of operations, including whole number exponents, and prime factorization

ITEM

32 Keith wrote the expression shown to determine the cost in dollars for an upcoming trip.

$$(127.50 - 23.50) + 3(86.50 + 4)$$

Which expression is equivalent to the one Keith wrote?

F 107(90.50)
G 101(90.50)
H 104 + 3(90.50)
J 104 + 263.50

Item Analysis	
Verb	Generate
Using or Including	Properties
Concept	Equivalent Expressions
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.7D Readiness Standard
generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties

ITEM

8 Shea wrote the expression $5(y + 2) + 4$ to show the amount of money five friends paid for snacks at a baseball game. Which expression is equivalent to the one Shea wrote?

F $5 + y + 5 + 2 + 4$
G $5 \cdot y \cdot 5 \cdot 2 + 4$
H $5 \cdot y \cdot 4 + 5 \cdot 2 \cdot 4$
J $5 \cdot y + 5 \cdot 2 + 4$

Item Analysis	
Verb	Generate
Using or Including	Properties
Concept	Equivalent Expressions
Process TEKS	**6.1A, 6.1B, 6.1F**

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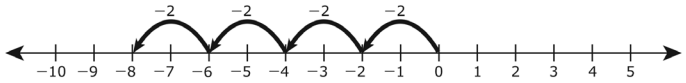
TEKS 6.3C Supporting Standard
represent integer operations with concrete models and connect the actions with the models to standardized algorithms

ITEM

24 Which expression is represented on the number line?



F 0 – (-8)
G -2 • 4
H -2 + (-8)
J -2 ÷ 4

Item Analysis	
Verb	Represent
Using or Including	Concrete Models
Concept	Integer Operations
Process TEKS	**6.1B, 6.1E, 6.1F**

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TEKS 6.3D Readiness Standard
add, subtract, multiply, and divide integers fluently

ITEM

1 Serena bought 5 shirts for $6 each and spent $7 on lunch. She paid for the shirts and lunch using her debit card. The change in the balance of Serena's checking account can be represented by the expression shown.

$$5(-6) + (-7)$$

Which integer represents the change in the balance of Serena's checking account from these purchases?

A -37
B 23
C -18
D 4

Item Analysis	
Verb	Add, Multiply
Using or Including	Fluently
Concept	Integers
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.3D Readiness Standard
add, subtract, multiply, and divide integers fluently

ITEM

33 LuAnn is playing a math game. She chooses three cards. The value of each of her cards is shown.

- First card: -12
- Second card: 3
- Third card: -5

What is the sum of the values of LuAnn's three cards?

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

Item Analysis	
Verb	Add
Using or Including	Fluently
Concept	Integers
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.3E Readiness Standard
multiply and divide positive rational numbers fluently

ITEM

18 A pharmacist put 4.536 ounces of vitamin pills into bottles. She put 0.042 ounce of vitamin pills into each bottle.

How many bottles did the pharmacist use of these vitamin pills?

F 11
G 5
H 18
J 108

Item Analysis	
Verb	Divide
Using or Including	Fluently
Concept	Positive Rational Numbers
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.4B Readiness Standard
apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates

ITEM

20 The table shows the time Monique worked and the amount of money she earned during four different weeks.

Monique's Earnings

Time Worked (hours)	Amount Earned (dollars)
15	123.75
20	165
24	198
30	247.50

Based on the information in the table, how much will Monique earn if she works 40 hours in a week?

F $330
G $255.75
H $297
J $82.50

Item Analysis	
Verb	Apply
Using or Including	Rates
Concept	Solve Real-World Problems
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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TEKS 6.5B Readiness Standard
solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models

ITEM

11 Yesterday 170 guests at a hotel called for room service, and 255 quests did not call for room service. What percentage of the guests at this hotel called for room service yesterday?

A 60%
B 15%
C 40%
D 85%

Item Analysis	
Verb	Solve
Using or Including	NA
Concept	Percent
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.5B Readiness Standard
solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models

ITEM

31 A shop owner offered a 20% discount off the regular price of a mirror. The amount of the discount is $3.

What is the regular price of the mirror?

A $15
B $6
C $9
D $18

Item Analysis	
Verb	Solve
Using or Including	NA
Concept	Find the Whole
Process TEKS	**6.1A, 6.1B, 6.1F**

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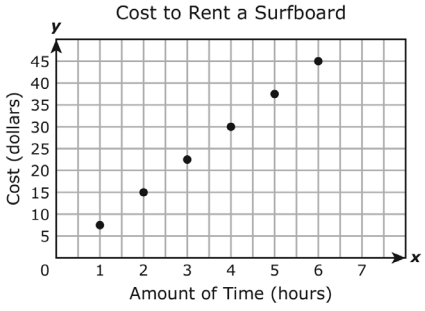
TEKS 6.6A Supporting Standard
identify independent and dependent quantities from tables and graphs

ITEM

28 The graph shows the cost to rent a surfboard for different amounts of time.



Which list best represents the independent values of the graphed points?

F 1, 7.50, 2, 15, 3, 22.50, 4, 30, 5, 37.20, 6, 45
G 5, 10, 15, 20, 25, 30, 35, 40, 45
H 7.50, 15, 22.50, 30, 37.50, 45
J 1, 2, 3, 4, 5, 6

Item Analysis	
Verb	Identify
Using or Including	Graph
Concept	Independent Quantity
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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TEKS 6.6C Readiness Standard
represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$

ITEM

5 A carpenter charges $720 for 18 hours of work. She charges the same amount of money for each hour of work.

Which table shows the relationship between the amount of time the carpenter works and the amount of money she charges?

A

Carpenter's Charges

Amount of Time Worked (hours)	Amount Charged (dollars)
2	80
4	160
6	240
8	320

C

Carpenter's Charges

Amount of Time Worked (hours)	Amount Charged (dollars)
3	75
5	125
7	175
9	225

B

Carpenter's Charges

Amount of Time Worked (hours)	Amount Charged (dollars)
19	720
20	738
21	756
22	774

D

Carpenter's Charges

Amount of Time Worked (hours)	Amount Charged (dollars)
14	720
15	720
16	720
17	720

Item Analysis

Verb	Represent
Using or Including	Table $y = ax$
Concept	Given Situation
Process TEKS	**6.1A, 6.1B, 6.1D, 6.1F**

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TEKS 6.6C Readiness Standard
represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$

ITEM

35 Which situation can be represented by the equation $y = 74x$?

A A company uses a total of y gallons of water at a rate of 74 gallons per hour for x hours.

B A restaurant serves a total of y meals in one day, in which 74 meals are served during the first hour and x meals are served during the remaining hours.

C A company manufactures a total of 74 drinking glasses every hours, with x of the glasses made of clear glass and y of them made of blue glass.

D A restaurant prepares a total of y batches of pizza sauce from 74 pounds of tomatoes, with each batch weighing x pounds.

Item Analysis

Verb	Represent
Using or Including	Verbal Description
Concept	$y = kx$
Process TEKS	**6.1A, 6.1B, 6.1D, 6.1G**

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TEKS 6.9B Supporting Standard
represent solutions for one-variable, one-step equations and inequalities on number lines

ITEM

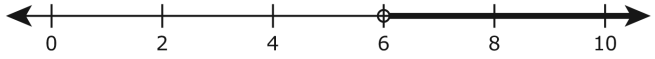
16 Which number line represents the solution to $5x < 30$?

F

G

H

J



Item Analysis	
Verb	Represent
Using or Including	Number Line
Concept	One-Variable, One-Step Inequality
Process TEKS	**6.1B, 6.1E, 6.1F**

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TEKS 6.9C Supporting Standard
write corresponding real-world problems given one-variable, one-step equations or inequalities

ITEM

26 Which situation can be represented by $17.35x > 624.50$?

F A waitress had received a $17.35 tip. This brought her total in tips to more than $624.60.

G Brianda made a deposit of $17.35 into a savings account. This brought the total of her savings account to $624.60. How much money did she have in this savings account before she made the deposit?

H A dozen tamales cost $17.35 including tax. How many dozen tamales can a customer buy with $624.60?

J Darren earns $17.35 per hour at his job. How many hours does he need to work in order to earn more than $624.60?

Item Analysis	
Verb	Write
Using or Including	NA
Concept	One-Variable, One-Step Inequality
Process TEKS	**6.1A, 6.1B, 6.1G**

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TEKS 6.10A Readiness Standard
model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts

ITEM

13 Alejandra has $600 in her checking account. She wants to spend part of this money on a computer. She wants to have at least $250 left in her checking account after buying the computer. The inequality shown can be used to find *t*, the amount of money in dollars that Alejandra can spend on the computer.

$$t + 250 \leq 600$$

Which inequality represents all possible values of *t*?

A $t \geq 350$
B $t \leq 850$
C $t \leq 350$
D $t \geq 850$

Item Analysis	
Verb	Solve
Using or Including	NA
Concept	One-Variable, One-Step Inequality
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.10A Readiness Standard
model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts

ITEM

38 The area of the rectangle shown is 375 square centimeters.

What is *h*, the height of the rectangle in centimeters?

F 350 cm
G 7.5 cm
H 15 cm
J 162.5 cm

Item Analysis	
Verb	Solve
Using or Including	Geometric Concepts
Concept	One-Variable, One-Step Equation
Process TEKS	**6.1B, 6.1C, 6.1E, 6.1F**

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TEKS 6.10B Supporting Standard
determine if the given value(s) make(s) one-variable, one-step equations or inequalities true

ITEM

22 Which equation has a solution of $k = 6.5$?

F $-3k = 19.5$
G $-1 + k = 7.5$
H $-7k = -45.5$
J $-2 + k = -8.5$

Item Analysis	
Verb	Determine
Using or Including	NA
Concept	Value True
Process TEKS	**6.1B, 6.1F**

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ITEM

Item Analysis	
Verb	
Using or Including	
Concept	
Process TEKS	

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TEKS 6.4H Readiness Standard
convert units within a measurement system, including the use of proportions and unit rates

ITEM

7 A can contains 24 fluid ounces of fruit juice. How many pints of fruit juice does the can contain?

A 12 pt
B 3 pt
C $1\frac{1}{2}$ pt
D $\frac{1}{3}$ pt

Item Analysis

Verb	Convert
Using or Including	Unit Rate
Concept	Measurement Systems
Process TEKS	**6.1A, 6.1B, 6.1C, 6.1F**

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TEKS 6.8A Supporting Standard
extend previous knowledge of triangles and their properties to include the sum of angles of a triangle, the relationship between the lengths of sides and measures of angles in a triangle, and determining when three lengths form a triangle

ITEM

25 Which set of angle measures CANNOT be the angle measures of a triangle?

A 60°, 60°, 61°
B 1°, 1°, 178°
C 13.9°, 16.1°, 150°
D 59°, 60°, 61°

Item Analysis

Verb	Extend
Using or Including	Sum of the Angles of a Triangle
Concept	Properties of Triangles
Process TEKS	**6.1B, 6.1C, 6.1F**

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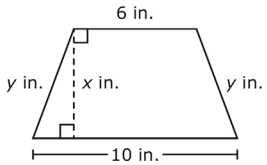
TEKS 6.8C Supporting Standard
write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers

ITEM

2 The face of a lamp shade is shaped like a trapezoid. The dimensions of the face are shown in the diagram.



Which equation can be used to find A, the area of the face of the lamp shade in square inches?

F $A = \frac{1}{2}(6 + 10)y$
G $A = \frac{1}{2}(6 + 10)x$
H $A = \frac{1}{2}(6) + (10)x$
J $A = \frac{1}{2}(6) + (10)y$

Item Analysis	
Verb	Write
Using or Including	Trapezoid
Concept	Area
Process TEKS	**6.1A, 6.1B, 6.1C, 6.1E, 6.1F**

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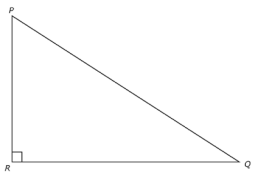
TEKS 6.8D Readiness Standard
determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers

ITEM

17 Triangle PQR is shown. Use the ruler provided to measure the dimensions of the triangle to the nearest $\frac{1}{2}$ inch.



Which measurement is closet to the area of triangle PQR in square inches?

A 5 in.^{2}
B $8\frac{3}{4}$ in.^{2}
C $6\frac{1}{2}$ in.^{2}
D 11 in.^{2}

Item Analysis	
Verb	Determine
Using or Including	NA
Concept	Area of a Trapezoid
Process TEKS	**6.1B, 6.1C, 6.1E, 6.1F**

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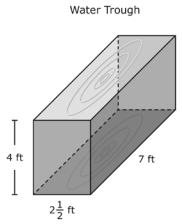
TEKS 6.8D Readiness Standard

determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers

ITEM

34 The figure represents a water trough in the shape of a rectangular prism. The dimensions of the water trough are given in feet.



What is the volume of water in the trough in cubic feet when the trough is full?

F $21\frac{1}{2}$ ft^3
G $13\frac{1}{2}$ ft^3
H 70 ft^3
J 76 ft^3

Item Analysis	
Verb	Determine
Using or Including	NA
Concept	Volume of a Rectangular Prism
Process TEKS	**6.1A, 6.1B, 6.1C, 6.1E, 6.1F**

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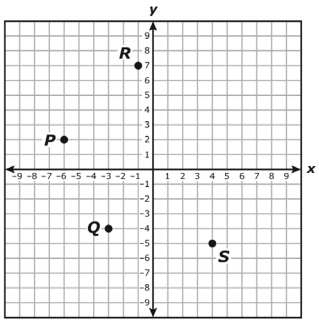
TEKS 6.11A Readiness Standard

graph points in all four quadrants using ordered pairs of rational numbers

ITEM

21 The coordinate grid shows point *P*, *Q*, *R*, and *S*. All coordinates for these points are integers.



What is the value of the *x*-coordinate of point *P*?

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

Item Analysis	
Verb	Graph
Using or Including	Ordered Pairs
Concept	Four Quadrants
Process TEKS	**6.1B, 6.1E, 6.1F**

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TEKS 6.12A Supporting Standard
represent numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots

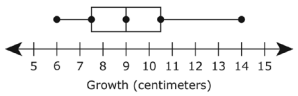
ITEM

27 The list shows the growth in centimeters of 12 plants during one week.

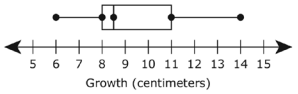
6, 7, 7, 8, 8, 8, 9, 9, 10, 11, 11, 14

Which box plot best displays a summary of these data?

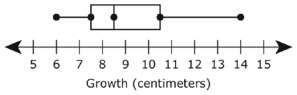
A



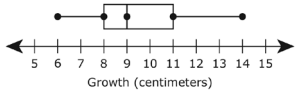
B



C



D



Item Analysis	
Verb	Represent
Using or Including	Stem-and-Leaf Plots
Concept	Graphed Data
Process TEKS	**6.1A, 6.1B, 6.1D, 6.1F**

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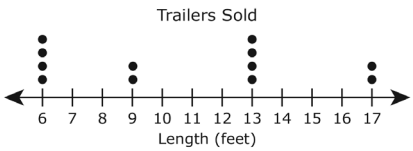
TEKS 6.12C Readiness Standard
summarize numeric data with numerical summaries, including the mean and median (measures of center) and the range and interquartile range (IQR) (measures of spread), and use these summaries to describe the center, spread, and shape of the data distribution

ITEM

4 The dot plot shows the lengths of the 12 trailer sold at a store last month.



Which statement about the data is true?

F The interquartile range is 7, and the range is 17.
G The interquartile range is 7, and the range is 11.
H The interquartile range is 2.75, and the range is 17.
J The interquartile range is 2.75, and the range is 11.

Item Analysis	
Verb	Summarize
Using or Including	Interquartile Range
Concept	Numerical Data
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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TEKS 6.12C Readiness Standard
summarize numeric data with numerical summaries, including the mean and median (measures of center) and the range and interquartile range (IQR) (measures of spread), and use these summaries to describe the center, spread, and shape of the data distribution

ITEM

29 Patricia recorded the prices of watches at a store. The prices are shown in the table.

Watches

Price (dollars)
15
22
16
24
16
20
12
27

What is the median price of the watches in dollars?

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

Item Analysis

Verb	Summarize
Using or Including	Table
Concept	Median
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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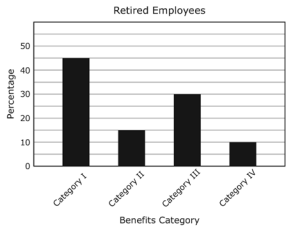
TEKS 6.12D Readiness Standard
summarize categorical data with numerical and graphical summaries, including the mode, the percent of values in each category (relative frequency table), and the percent bar graph, and use these summaries to describe the data distribution

ITEM

37 Employees who have retired from a company are placed in different benefit categories. The bar graph shows the percentages of the retired employees in different benefit categories.



Which statement about the employees is supported by the data in the bar graph?

A More than half the employees are in Category I.

B The number of employees in Category II is twice the number of employees in Category III.

C The number of employees in Category II or Category III is greater than the number of employees in Category I.

D The number of employees in Category I is three times the number of employees in Category II.

Item Analysis

Verb	Summarize
Using or Including	Bar Graph
Concept	Numeric Data Summarized
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1G**

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TEKS 6.13A Readiness Standard
interpret numeric data summarized in dot plots, stem-and-leaf plots, histograms, and box plots

ITEM

19 The stem and leaf plot shows the percentage of questions on a Spanish test that were answered correctly by each student in a class.

Spanish Test

Stem	Leaf
7	0 0 0 5 5 5 5 5
8	0 0 0 5 5 5
9	0 0 5 5
10	0

7|0 means 70%.

Which statement is true?

A Nine students answered 55% of the questions correctly.
B Half the students answered 70% or 75% of the questions correctly.
C Eight students answered more than 80% of the questions correctly.
D Ten students answered 100% of the questions correctly.

Item Analysis	
Verb	Interpret
Using or Including	Stem-and-Leaf Plot
Concept	Numeric Data Summarized
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1G**

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TEKS 6.14E Supporting Standard
describe the information in a credit report and how long it is retained

ITEM

15 Consumers sometimes make choices that cause negative information to be put on their credit reports. Which of these is the most likely number of years that this negative information will remain on their credit reports?

A 3 to 6 years
B 7 to 10 years
C 11 to 14 years
D 15 to 18 years

Item Analysis	
Verb	Distinguish
Using or Including	NA
Concept	Credit Report
Process TEKS	**6.1A, 6.1B, 6.1F**

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TEKS 6.14H Supporting Standard
compare the annual salary of several occupations requiring various levels of post-secondary education or vocational training and calculate the effects of the different annual salaries on lifetime income

ITEM

9 The table shows the approximate median annual salaries associated with two levels of education.

Median Annual Salaries

Level of Education	Bachelor's degree	Master's degree
Median Annual Salary (dollars)	57,600	69,100

Based on the data in the table, how much more money would a person with a master's degree earn than a person with a bachelor's degree over 35-year career?

A $402,500
B $126,770
C $11,500
D $4,434,500

Item Analysis	
Verb	Calculate
Using or Including	NA
Concept	Annual Salaries
Process TEKS	**6.1A, 6.1B, 6.1E, 6.1F**

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ITEM

Item Analysis	
Verb	
Using or Including	
Concept	
Process TEKS	

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Category 1
Numerical Representations and Relationships
10 Total Questions

TEKS	Item	Correct Answer	Process TEKS
6.2A classify whole numbers, integers, and rational numbers using a visual representation such as a Venn diagram to describe relationships between sets of numbers	**36**	**G**	**6.1B, 6.1E, 6.1F**
6.2B identify a number, its opposite, and its absolute value	**3**	**D**	**6.1A, 6.1B, 6.1F**
6.2C locate, compare, and order integers and rational numbers using a number line	**NT**		
6.2D order a set of rational numbers arising from mathematical and real-world contexts	**14**	**F**	**6.1A, 6.1B, 6.1F**
	30	**H**	**6.1B, 6.1F**
6.2E extend representations for division to include fraction notation such as a/b represents the same number as $a \div b$ where $b \neq 0$	**NT**		
6.4C give examples of ratios as multiplicative comparisons of two quantities describing the same attribute	**NT**		
6.4D give examples of rates as the comparison by division of two quantities having different attributes, including rates as quotients	**NT**		
6.4E represent ratios and percents with concrete models, fractions, and decimals	**NT**		
6.4F represent benchmark fractions and percents such as 1%, 10%, 25%, 33 1/3%, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers	**6**	**G**	**6.1A, 6.1B, 6.1E, 6.1F**
6.4G generate equivalent forms of fractions, decimals, and percents using real-world problems, including problems that involve money	**10**	**0.17**	**6.1A, 6.1B, 6.1F**
	23	**D**	**6.1A, 6.1B, 6.1F**
6.5C use equivalent fractions, decimals, and percents to show equal parts of the same whole	**NT**		
6.7A generate equivalent numerical expressions using order of operations, including whole number exponents, and prime factorization	**12**	**F**	**6.1B, 6.1F**
	32	**H**	**6.1A, 6.1B, 6.1F**
6.7B distinguish between expressions and equations verbally, numerically, and algebraically	**NT**		
6.7C determine if two expressions are equivalent using concrete models, pictorial models, and algebraic representations	**NT**		
6.7D generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties	**8**	**J**	**6.1A, 6.1B, 6.1F**

Shaded - Readiness TEKS, NT - Not Tested
Readiness TEKS - 7/10 questions

Category 2
Computations and Algebraic Relationships
15 Total Questions

TEKS	Item	Correct Answer	Process TEKS
6.3A recognize that dividing by a rational number and multiplying by its reciprocal result in equivalent values	**NT**		
6.3B determine, with and without computation, whether a quantity is increased or decreased when multiplied by a fraction, including values greater than or less than one	**NT**		
6.3C represent integer operations with concrete models and connect the actions with the models to standardized algorithms	**24**	**G**	**6.1B, 6.1E, 6.1F**
6.3D add, subtract, multiply, and divide integers fluently	**1**	**A**	**6.1A, 6.1B, 6.1F**
	33	**-14**	**6.1A, 6.1B, 6.1F**
6.3E multiply and divide positive rational numbers fluently	**18**	**J**	**6.1A, 6.1B, 6.1F**
6.4A compare two rules verbally, numerically, graphically, and symbolically in the form of $y = ax$ or $y = x + a$ in order to differentiate between additive and multiplicative relationships	**NT**		
6.4B apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates	**20**	**F**	**6.1A, 6.1B. 6.1E, 6.1F**
6.5A represent mathematical and real-world problems involving ratios and rates using scale factors, tables, graphs, and proportions	**NT**		
6.5B solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models	**11**	**C**	**6.1A, 6.1B, 6.1F**
	31	**A**	**6.1A, 6.1B, 6.1F**
6.6A identify independent and dependent quantities from tables and graphs	**28**	**J**	**6.1A, 6.1B, 6.1E, 6.1F**
6.6B write an equation that represents the relationship between independent and dependent quantities from a table	**NT**		
6.6C represent a given situation using verbal descriptions, tables, graphs, and equations in the form $y = kx$ or $y = x + b$	**5**	**A**	**6.1A, 6.1B. 6.1D, 6.1F**
	25	**A**	**6.1A, 6.1B. 6.1D, 6.1G**
6.9A write one-variable, one-step equations and inequalities to represent constraints or conditions within problems	**NT**		
6.9B represent solutions for one-variable, one-step equations and inequalities on number lines	**16**	**H**	**6.1B, 6.1E, 6.1F**
6.9C write corresponding real-world problems given one-variable, one-step equations or inequalities	**26**	**J**	**6.1A, 6.1B, 6.1G**
6.10A model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts	**13**	**C**	**6.1A, 6.1B, 6.1F**
	38	**H**	**6.1B, 6.1C. 6.1E, 6.1F**
6.10B determine if the given value(s) make(s) one-variable, one-step equations or inequalities true	**22**	**H**	**6.1B, 6.1F**

Shaded - Readiness TEKS, NT - Not Tested
Readiness TEKS - 10/15 questions

Category 3
Geometry and Measurement
6 Total Questions

TEKS	Item	Correct Answer	Process TEKS
6.4H convert units within a measurement system, including the use of proportions and unit rates	**7**	**C**	**6.1A, 6.1B. 6.1C, 6.1F**
6.8A extend previous knowledge of triangles and their properties to include the sum of angles of a triangle, the relationship between the lengths of sides and measures of angles in a triangle, and determining when three lengths form a triangle	**25**	**A**	**6.1B, 6.1C, 6.1F**
6.8B model area formulas for parallelograms, trapezoids, and triangles by decomposing and rearranging parts of these shapes	**NT**		
6.8C write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers	**2**	**G**	**6.1A, 6.1B, 6.1C, 6.1E, 6.1F**
6.8D determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers	**17**	**A**	**6.1B, 6.1C. 6.1E, 6.1F**
	34	**H**	**6.1A, 6.1B. 6.1C, 6.1E, 6.1F**
6.11A graph points in all four quadrants using ordered pairs of rational numbers	**21**	**-6**	**6.1B, 6.1E, 6.1F**

Shaded - Readiness TEKS, NT - Not Tested
Readiness TEKS - 4/6 questions

Category 4
Data Analysis and Personal Finance
7 Total Questions

TEKS	Item	Correct Answer	Process TEKS
6.12A represent numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots	**27**		**6.1A, 6.1B, 6.1D, 6.1F**
6.12B use the graphical representation of numeric data to describe the center, spread, and shape of the data distribution	**NT**		
6.12C summarize numeric data with numerical summaries, including the mean and median (measures of center) and the range and interquartile range (IQR) (measures of spread), and use these summaries to describe the center, spread, and shape of the data distribution	**4**		**6.1A, 6.1B. 6.1E, 6.1F**
	29		**6.1A, 6.1B. 6.1E, 6.1F**
6.12D summarize categorical data with numerical and graphical summaries, including the mode, the percent of values in each category (relative frequency table), and the percent bar graph, and use these summaries to describe the data distribution	**37**		**6.1A, 6.1B. 6.1E, 6.1G**
6.13A interpret numeric data summarized in dot plots, stem-and-leaf plots, histograms, and box plots	**19**		**6.1A, 6.1B. 6.1E, 6.1G**
6.13B distinguish between situations that yield data with and without variability	**NT**		
6.14A compare the features and costs of a checking account and a debit card offered by different local financial institutions	**NT**		
6.14B distinguish between debit cards and credit cards	**NT**		
6.14C balance a check register that includes deposits, withdrawals, and transfers	**NT**		
6.14E describe the information in a credit report and how long it is retained	**15**		**6.1B, 6.1E, 6.1F**
6.14F describe the value of credit reports to borrowers and to lenders	**NT**		
6.14G explain various methods to pay for college, including through savings, grants, scholarships, student loans, and work-study	**NT**		
6.14H compare the annual salary of several occupations requiring various levels of post-secondary education or vocational training and calculate the effects of the different annual salaries on lifetime income	**9**		**6.1A, 6.1B, 6.1E, 6.1F**

Shaded - Readiness TEKS, NT - Not Tested
Readiness TEKS - 4/7 questions