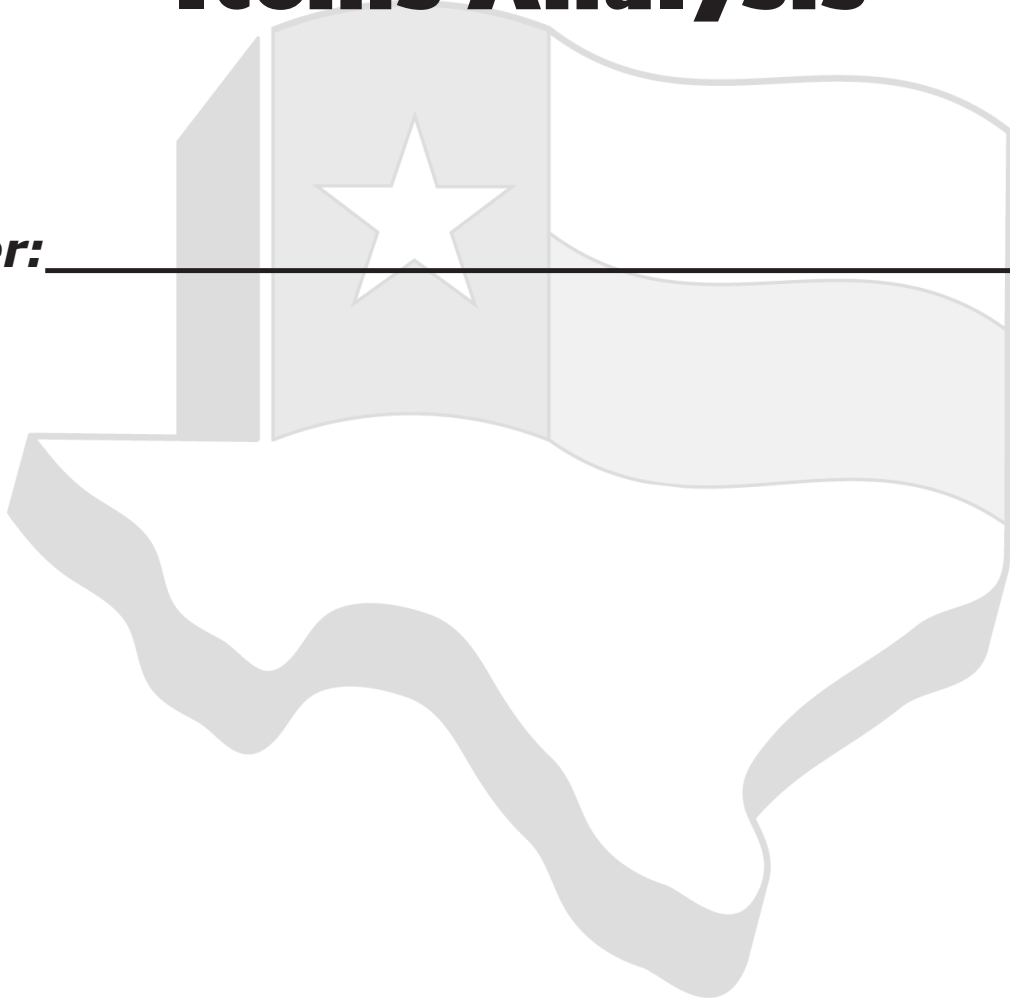


Step Up to the TEKS
by GF Educators, Inc.

Third Grade Mathematics

2016 Released Items Analysis

Teacher: _____



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Edition I



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3rd Grade Mathematics

Released Items

Name: _____

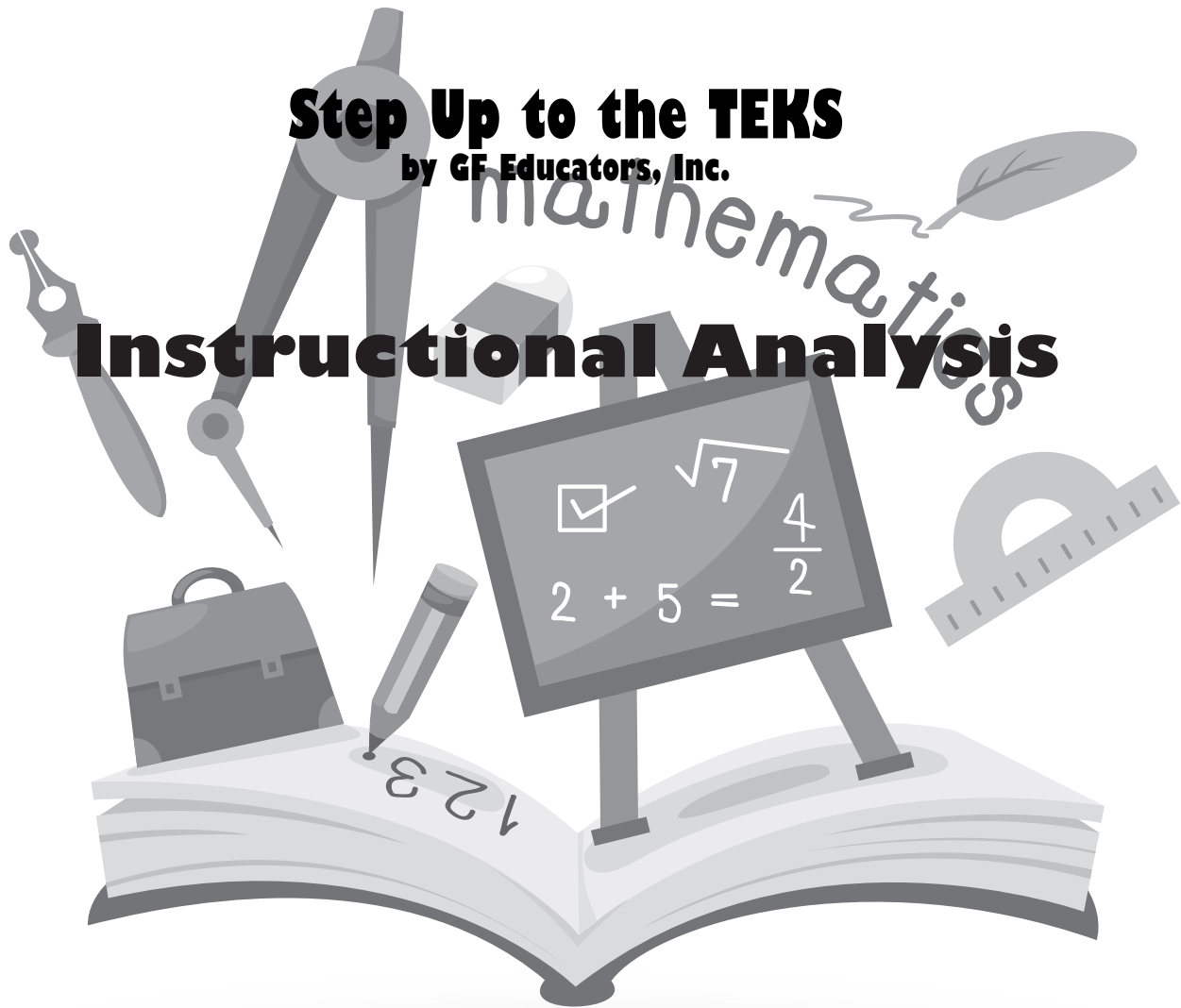
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Date: _____

Step Up to the TEKS

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Instructional Analysis



TEKS 3.2A Readiness Standard
compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate

ITEM 13 Which expression represents the number 867? A 80 + 60 + 70 B 800 + 6 + 7 C 500 + 300 + 50 + 10 + 7 D 500 + 300 + 60 + 70	Item Analysis	
	Verb	Decompose
	Using or Including	Expanded Notation
	Concept	Sum of Numbers up to 100,000
	Process TEKS	3.1B, 3.1F
	Notes	

TEKS 3.2A Readiness Standard
compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate

ITEM 27 The sum of 8 ten thousands, 4 hundreds, and 9 tens can be expressed as what number in standard form? A 80,490 B 8,490 C 849 D 80,049	Item Analysis	
	Verb	Compose
	Using or Including	NA
	Concept	Sum of Numbers up to 100,000
	Process TEKS	3.1B, 3.1D, 3.1F
	Notes	

TEKS 3.2B Supporting Standard
describe the mathematical relationships found in the base-10 place value system through the hundred thousands place

ITEM 45 What is the relationship between the thousands place and the hundreds place in the number shown? <div style="text-align: center;">971,111</div> <p>A The thousands place is two times greater than the hundreds place. B The thousands place is ten times greater than the hundreds place. C The thousands place is seven times greater than the hundreds place. D The thousands place is zero times greater than the hundreds place.</p>	Item Analysis	
	Verb	Describe
	Using or Including	NA
	Concept	Mathematical Relationships
	Process TEKS	3.1B, 3.1G
Notes		


TEKS 3.2D Readiness Standard
compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>$, $<$, or $=$

ITEM 7 The table below shows the number of each kind of magazine sold in a store during one month. <div style="text-align: center;">Magazines Sold</div> <table border="1" style="margin: auto;"> <thead> <tr> <th>Kind of Magazine</th> <th>Number Sold</th> </tr> </thead> <tbody> <tr> <td>Fashion</td> <td>1,728</td> </tr> <tr> <td>News</td> <td>1,723</td> </tr> <tr> <td>Entertainment</td> <td>2,114</td> </tr> <tr> <td>Sports</td> <td>2,186</td> </tr> </tbody> </table> <p>Which list shows the kinds of magazines in order from greatest to least number sold? A Sports, entertainment, fashion, news B Fashion, sports, entertainment, news C Sports, fashion, news, entertainment D Fashion, news, entertainment, sports</p>	Kind of Magazine	Number Sold	Fashion	1,728	News	1,723	Entertainment	2,114	Sports	2,186	Item Analysis	
	Kind of Magazine	Number Sold										
	Fashion	1,728										
	News	1,723										
	Entertainment	2,114										
Sports	2,186											
Verb	Compare and Order											
Using or Including	NA											
Concept	Whole Numbers up to 100,000											
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F											
Notes												

TEKS 3.2D Readiness Standard
compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>$, $<$, or $=$

<p>ITEM 38 The list shows three clues about a number.</p> <ul style="list-style-type: none"> • The number is greater than 85,629. • The number is less than 88,231. • The number has a digit greater than 6 in the hundreds place. <p>Which of these could be the number described?</p> <p>F 88,165 G 85,625 H 88,930 J 87,720</p>	Item Analysis	
	Verb	Compare
	Using or Including	NA
	Concept	Whole Numbers up to 100,000
	Process TEKS	3.1B, 3.1F
	Notes	

TEKS 3.3A Supporting Standard
represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines

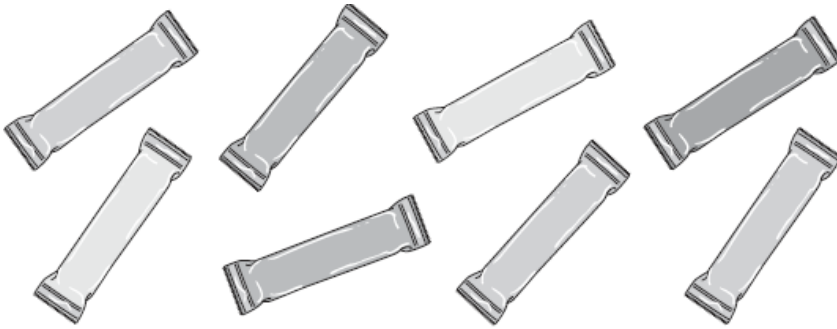
<p>ITEM 1 Anissa shaded part of the figure shown below.</p>  <p>What fraction of the figure is shaded?</p> <p>A $\frac{6}{8}$ B $\frac{1}{6}$ C $\frac{2}{8}$ D $\frac{2}{6}$</p>	Item Analysis	
	Verb	Represent
	Using or Including	Denominator of 8
	Concept	Fractions Greater Than Zero or Equal To One
	Process TEKS	3.1A, 3.1B, 3.1D, 3.1F
	Notes	

TEKS 3.3E Supporting Standard

solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8

ITEM

32 Lonny opened a new box of granola bars. Lonny and three of his friends equally shared the granola bars shown in the picture.



What fraction of the granola bars did each of them get?

- F $\frac{3}{8}$
- G $\frac{2}{8}$
- H $\frac{1}{8}$
- J $\frac{4}{8}$

Item Analysis

Verb	Solve
Using or Including	Pictorial Representation Denominator of 8
Concept	Partitioning of Objects
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

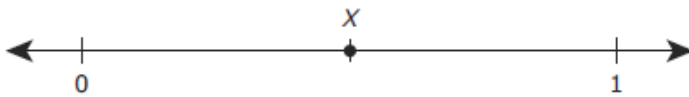
Notes

TEKS 3.3F Readiness Standard

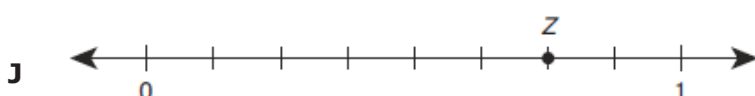
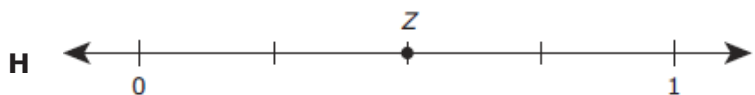
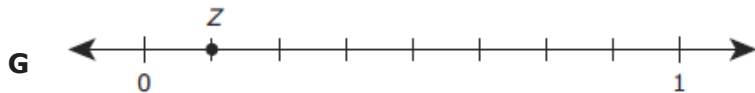
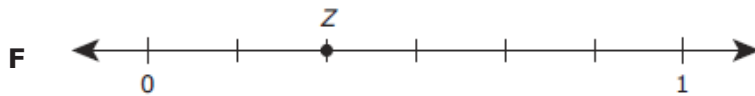
represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines

ITEM

10 Point X on the number line represents a fraction.



On which number line does point Z represent a fraction equivalent to the one represented by point X?



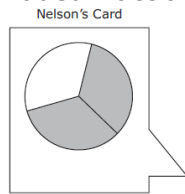
Item Analysis

Verb	Represent
Using or Including	Number Line
Concept	Equivalent Fractions Denominators of 2 & 4
Process TEKS	3.1B, 3.1E, 3.1F

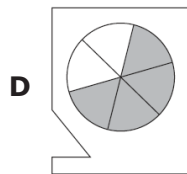
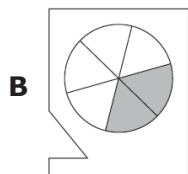
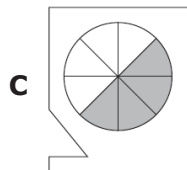
Notes

TEKS 3.3F Readiness Standard
represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines

25 Nelson is playing a math game. He needs to match two cards that show equivalent shaded fractions.



Which of these cards shows a fraction that is equivalent to the fraction on Nelson's card?



Item Analysis

Verb	Represent
Using or Including	Pictorial Models
Concept	Equivalent Fractions Denominators 3 & 6
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.3H Readiness Standard
compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models

ITEM

16 Bailey and Dylan each had pies that were the same size. Bailey ate $\frac{1}{3}$ of his pie. Dylan ate $\frac{1}{4}$ of his pie. Which statement is true?

- F** The boys ate the same amount of pie, because both fractions have a numerator of 1.
- G** Bailey ate more pie, because each slice of a pie cut into 3 equal parts is larger than each slice of a pie cut into 4 equal parts.
- H** Dylan ate more pie, because a denominator of 4 is larger than a denominator of 3.
- J** There is not enough information to determine who ate more pie.

Item Analysis

Verb	Compare
Using or Including	Words
Concept	Two Fractions Same Numerators
Process TEKS	3.1A, 3.1B, 3.1G

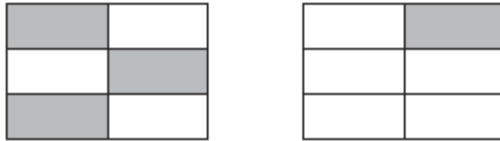
Notes

TEKS 3.3H Readiness Standard

compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models

ITEM

41 Lily is painting two identical walls. The models are shaded to represent the fraction of each wall that is painted purple.



Which comparison of these fractions is true?

- A $\frac{3}{6} = \frac{5}{6}$
- B $\frac{3}{6} > \frac{1}{6}$
- C $\frac{3}{6} > \frac{5}{6}$
- D $\frac{3}{6} < \frac{1}{6}$

Item Analysis

Verb	Compare
Using or Including	Symbols Pictorial Models
Concept	Two Fractions
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.4I Supporting Standard

determine if a number is even or odd using divisibility rules

ITEM

22 Which statement about the number 34 is true?

- F It is odd, because the digit in the tens place is odd.
- G It is even, because the digit in the tens place is even.
- H It is odd, because it can be divided by 3 evenly.
- J It is even, because it can be divided by 2 evenly.

Item Analysis

Verb	Determine
Using or Including	Divisibility Rules
Concept	Even Numbers
Process TEKS	3.1B, 3.1G

Notes



TEKS 3.4A Readiness Standard
 solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction

<p>ITEM</p> <p>8 Wanda traveled on an airplane three times last year.</p> <ul style="list-style-type: none"> • In January she traveled 278 miles. • In April she traveled 652 miles. • In September she traveled 767 miles. <p>How many more miles did Wanda travel in January and April combined than she traveled in September?</p> <p>F 930 mi G 147 mi H 163 mi J 237 mi</p>	Item Analysis	
	Verb	Solve
	Using or Including	Addition/Subtraction
	Concept	Two Step
	Process TEKS	3.1A, 3.1B, 3.1F
	Notes	

TEKS 3.4A Readiness Standard
 solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction

<p>ITEM</p> <p>35 Adyssen started with \$87 in her bank account. She put \$213 into her account last week and another \$137 this week. What is the total amount Adyssen now has in her bank account?</p> <p>Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.</p>	Item Analysis	
	Verb	Solve
	Using or Including	Addition
	Concept	One-Step
	Process TEKS	3.1A, 3.1B, 3.1F
	Notes	

TEKS 3.4A Readiness Standard

solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction

ITEM

46 Mr. Thompson sold 247 meals on Tuesday at his restaurant. He sold 516 meals on Wednesday. What is the difference between the numbers of meals Mr. Thompson sold on these two days?

- F** 763
- G** 331
- H** 379
- J** 269

Item Analysis

Verb	Solve
Using or Including	Subtraction
Concept	One-Step
Process TEKS	3.1A, 3.1B, 3.1F

Notes

TEKS 3.4B Supporting Standard

round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems

ITEM

33 Vicente hung three posters in his bedroom.

- The first poster had a length of 59 centimeters.
- The second poster had a length of 92 centimeters.
- The third poster had a length of 127 centimeters.

What is the best estimate of the total length of these three posters in centimeters?

- A** 260 cm
- B** 350 cm
- C** 240 cm
- D** 280 cm

Item Analysis

Verb	Round
Using or Including	Addition
Concept	Nearest 10
Process TEKS	3.1A, 3.1B, 3.1C, 3.1F

Notes

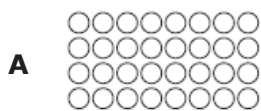
TEKS 3.4E Supporting Standard
represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting

ITEM

21 Zachary lists some different methods he thinks he can use to solve the multiplication problem shown.

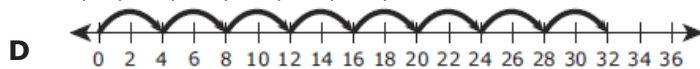
$$8 \times 4 = ?$$

Which of these is **not** a method Zachary can use to get the correct answer?



B $8 \times 8 \times 8 \times 8$

C 4, 8, 12, 16, 20, 24, 28, 32



Item Analysis

Verb

Represent

Using or Including

Variety of Approaches

Concept

Multiplication Facts

Process TEKS

3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.4G Supporting Standard

use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties

ITEM

2 The members of a gym use 98 towels every day. How many towels are used in 7 days?

F 636

G 14

H 686

J 91

Item Analysis

Verb

Use

Using or Including

Strategies or Algorithms

Concept

Multiply a 2-Digit by a 1-Digit

Process TEKS

3.1A, 3.1B, 3.1F

Notes

TEKS 3.4H Supporting Standard

determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally

ITEM

6 Daria has 42 baseball gloves in her store.



She will put these gloves on 7 shelves. She will put the same number of gloves on each shelf. How many gloves will Daria put on each shelf?

- F** 8, because $42 \div 7 = 8$
- G** 9, because $42 \div 7 = 9$
- H** 6, because $42 \div 7 = 6$
- J** 7, because $42 \div 7 = 7$

Item Analysis

Verb	Determine
Using or Including	Set of Objects Partitioned
Concept	Objects in a Set
Process TEKS	3.1A, 3.1B, 3.1E, 3.1G

Notes

TEKS 3.4J Supporting Standard

determine a quotient using the relationship between multiplication and division

ITEM

18 There are a total of 36 bicycles in 6 rows at a bicycle shop. There are the same number of bicycles in each row. Which equation can be used to find the number of bicycles in each row?

- F** $6 \times 6 = 36$
- G** $36 \div 6 = 30$
- H** $36 \times 6 = 216$
- J** $6 + 6 = 12$

Item Analysis

Verb	Determine
Using or Including	Relationship Between Multiplication & Division
Concept	Quotient
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.4K Readiness Standard
solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts

ITEM	Item Analysis	
<p>19 There are two different vegetables in a garden.</p> <ul style="list-style-type: none"> • There are 5 rows that have 16 carrot plants in each row. • There are 72 spinach plants. <p>How many vegetable plants are there in the garden?</p> <p>A 152 B 88 C 93 D 122</p>	Verb	Solve
	Using or Including	Strategies Based on Objects
	Concept	Two-Step Multiplication/Addition
	Process TEKS	3.1A, 3.1B, 3.1F
	Notes	

TEKS 3.4K Readiness Standard
solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts

ITEM	Item Analysis	
<p>37 Ms. Losoya has 72 index cards. She will arrange the cards in 6 equal stacks. How many index cards will be in each stack?</p> <p>A 12 B 9 C 78 D 66</p>	Verb	Solve
	Using or Including	Equal Groups
	Concept	One-Step Division
	Process TEKS	3.1A, 3.1B, 3.1F
	Notes	

TEKS 3.5A Readiness Standard

represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations

ITEM

4 Rita had two boxes of ribbons.

- She had 37 large ribbons in the first box.
- She had 56 small ribbons in the second box.
- She gave 28 of the large ribbons to her sister.

Which number sentence can be used to find the number of ribbons Rita had left in the two boxes?

F $56 + 28 + 37 = \square$

G $37 + 28 + 56 = \square$

H $37 + 28 - 56 = \square$

J $56 + 28 - 37 = \square$

Item Analysis

Verb	Represent
-------------	-----------

Using or Including	Equations
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Concept	Two-Step Addition & Subtraction
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Process TEKS	3.1A, 3.1B, 3.1D, 3.1F
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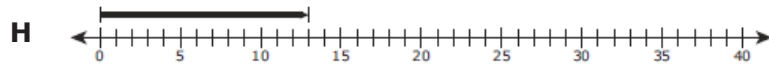
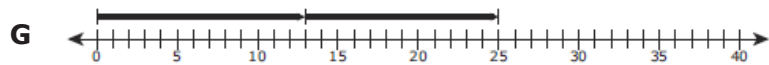
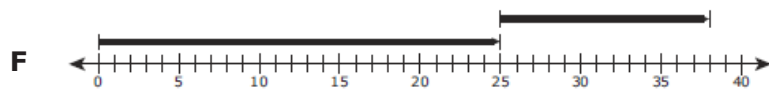
Notes

TEKS 3.5A Readiness Standard

represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations

ITEM

28 There were 25 people in a library. Some people left the library and went home. Then there were 13 people remaining in the library. Which number line represents one way to determine the number of people who left the library?



Item Analysis

Verb	Represent
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Using or Including	Number Lines
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Concept	One-Step Subtraction
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Process TEKS	3.1A, 3.1B, 3.1D, 3.1F
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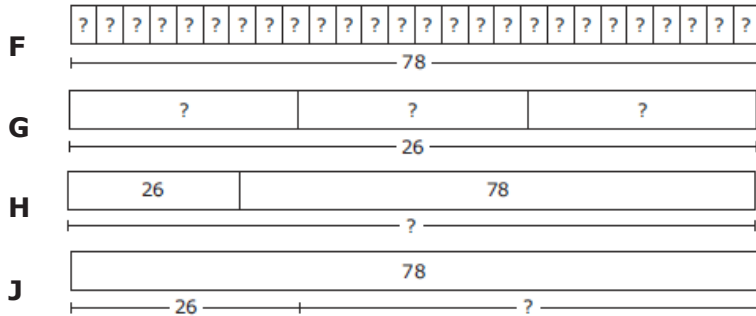
Notes

TEKS 3.5B Readiness Standard

represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations

ITEM

14 Edward made 26 hamburgers. He used a total of 78 pickle slices on the hamburgers. He put the same number of pickle slices on each hamburger. Which diagram shows how to find the number of pickle slices Edward put on each hamburger?



Item Analysis

Verb	Represent
Using or Including	Strip Diagram
Concept	One-Step Division
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.5B Readiness Standard

represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations

ITEM

24 To make posters, 6 students each collected 8 pictures of animals. The students put 4 animal pictures on each poster they made. Which equation shows one way to find the number of posters the students made?

- F** $6 + 8 + 4 = 18$
- G** $6 \times 8 \div 4 = 12$
- H** $6 \times 8 \times 4 = 192$
- J** $6 + 8 - 4 = 10$

Item Analysis

Verb	Represent
Using or Including	Equations
Concept	Two-Step Multiplication & Division
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.5D Supporting Standard

determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product

ITEM

42 What number goes in the to make a true statement?

$$\text{} \times 5 = 45$$

- F** 50
- G** 8
- H** 9
- J** 40

Item Analysis

Verb	Determine
Using or Including	Missing Factor
Concept	Unknown Whole Number
Process TEKS	3.1B, 3.1F

Notes

TEKS 3.5E Readiness Standard

represent real-world relationships using number pairs in a table and verbal descriptions

ITEM

12 Campers at a lake rented 18 more canoes than paddle boats each week during five weeks. Which table could show the numbers of canoes and paddle boats rented during these five weeks?

Canoes and Paddleboats

	Number of Canoes	Number of Paddleboats
F	72	90
	37	55
	61	79
	85	103
	68	86

Canoes and Paddleboats

	Number of Canoes	Number of Paddleboats
H	72	54
	37	19
	61	43
	85	67
	68	50

Canoes and Paddleboats

	Number of Canoes	Number of Paddleboats
G	72	54
	37	72
	61	90
	85	108
	68	126

Canoes and Paddleboats

	Number of Canoes	Number of Paddleboats
J	72	18
	37	36
	61	54
	85	72
	68	90

Item Analysis

Verb	Represent
Using or Including	Number Pairs in a Table
Concept	Real-World Relationships
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.5E Readiness Standard
represent real-world relationships using number pairs in a table and verbal descriptions

ITEM

30 There are 8 socks in each package sold at a shoe store. Which table shows the number of socks in different numbers of these packages?

Packages of Socks

F

Number of Packages	5	8	10	11
Number of Socks	40	48	56	64

Packages of Socks

G

Number of Packages	5	8	10	11
Number of Socks	40	64	88	112

Packages of Socks

H

Number of Packages	5	8	10	11
Number of Socks	40	64	80	88

Packages of Socks

J

Number of Packages	5	8	10	11
Number of Socks	40	80	120	160

Item Analysis

Verb

Represent

Using or Including

Number Pairs in a Table

Concept

Real-World Relationships

Process TEKS

3.1A, 3.1B, 3.1D, 3.1F

Notes

TEKS 3.5E Readiness Standard
represent real-world relationships using number pairs in a table and verbal descriptions

ITEM

40 The table shows the numbers of flowers of different colors in four vases.

Flowers in Vases

Vase	Yellow	Red
Q	9	3
R	15	5
S	21	7
T	27	9

Based on the relationship shown in the table, which statement is true?

- F** There are 3 times as many yellow flowers as red flowers in each vase.
- G** There are 9 times as many yellow flowers as red flowers in each vase.
- H** There are 6 times as many yellow flowers as red flowers in each vase.
- J** There are 11 times as many yellow flowers as red flowers in each vase.

Item Analysis

Verb

Represent

Using or Including

Number Pairs in a Table

Concept

Real-World Relationships

Process TEKS

3.1A, 3.1B, 3.1D, 3.1G

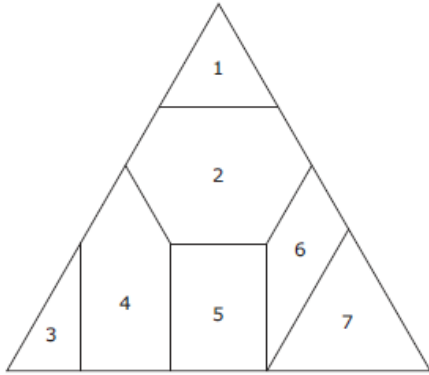
Notes

TEKS 3.6A Readiness Standard

classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language

ITEM

20 A figure is divided into 7 sections, as shown below.



Which 2 sections are quadrilaterals?

- F** Sections 4 and 5
- G** Sections 2 and 4
- H** Sections 1 and 3
- J** Sections 5 and 6

Item Analysis

Verb	Classify
Using or Including	Equilateral
Concept	Two-Dimensional Figures
Process TEKS	3.1B, 3.1E, 3.1F

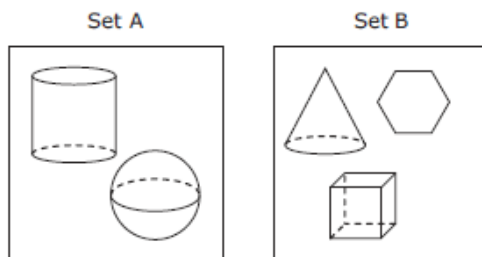
Notes

TEKS 3.6A Readiness Standard

classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language

ITEM

34 Sofia separated some figures into two sets. The figures in Set A have a common characteristic. The figures in Set B do not have the characteristic.



Which of these is the best description of the common characteristic of the figures in Set A?

- F** They have no vertices.
- G** They have at least one circular base.
- H** They have at least one edge.
- J** They have faces that are polygons.

Item Analysis

Verb	Sort
Using or Including	Formal Geometric Language
Concept	Three-Dimensional Figures
Process TEKS	3.1A, 3.1B, 3.1E, 3.1G

Notes

TEKS 3.6B Supporting Standard

use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories

ITEM

17 A group of figures is shown.

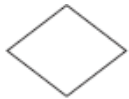


Figure V



Figure W



Figure X



Figure Y



Figure Z

Which of these figures do not appear to be a rhombus, trapezoid, rectangle, or square?

- A Figures V, W, X, and Z
- B Figures W and Y
- C Figure Y only
- D Figures V, X, and Z only

Item Analysis

Verb	Use
Using or Including	NA
Concept	Rhombus, Trapezoid, Rectangle, or Square
Process TEKS	3.1B, 3.1E, 3.1F

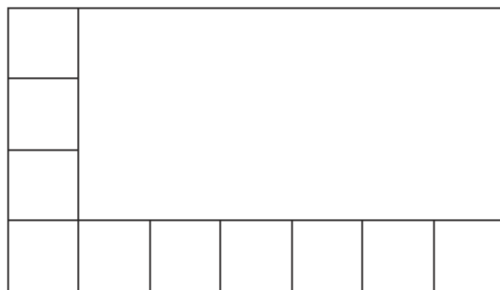
Notes

TEKS 3.6C Readiness Standard

determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row

ITEM

11 Felicia started placing square tiles inside a rectangle, as shown in the diagram. Each square tile has a side length of 1 cm.



1 cm

She continued placing square tiles without any overlaps to cover the rectangle. What is the area of the rectangle in square centimeters?

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

Item Analysis

Verb	Determine
Using or Including	Multiplication
Concept	Area of Rectangles
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.6C Readiness Standard

determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row

ITEM

39 Donte counted the square tiles on a rectangular floor at his school. Each tile had an area of 1 square foot. On the floor there were 9 rows of tiles and 36 tiles in each row. What is the area of the floor in square feet?

- A** 360 square feet
- B** 45 square feet
- C** 324 square feet
- D** 90 square feet

Item Analysis

Verb	Determine
Using or Including	Multiplication
Concept	Area of Rectangles
Process TEKS	3.1A, 3.1B, 3.1F

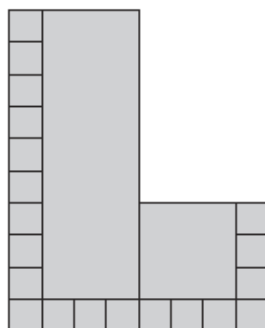
Notes

TEKS 3.6D Supporting Standard

decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area

ITEM

31 Denise planted a flower garden with a rectangular section and a square section, as shown.



= 1 square foot

What is the total area of the garden in square feet?

- A** 56 square feet
- B** 112 square feet
- C** 80 square feet
- D** Not here

Item Analysis

Verb	Decompose
Using or Including	Additive Property of Area
Concept	Total Area
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.7B Readiness Standard

determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems

ITEM

26 A triangular sign has a perimeter of 44 centimeters. Two of the sides are each 14 centimeters long. What is the length of the third side in centimeters?

- F** 28 cm
- G** 16 cm
- H** 30 cm
- J** 14 cm

Item Analysis

Verb	Determine
Using or Including	NA
Concept	Perimeter Triangle
Process TEKS	3.1A, 3.1B, 3.1F

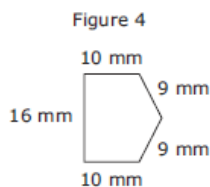
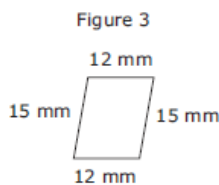
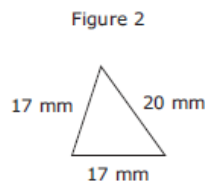
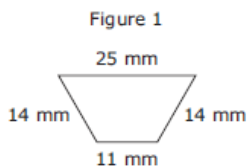
Notes

TEKS 3.7B Readiness Standard

determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems

ITEM

44 Felix drew the figures shown below.



Which list shows all the figures that have a perimeter of 54 millimeters?

- F** Figures 2, 3, and 4
- G** Figures 2 and 4
- H** Figures 1 and 3
- J** Figures 1, 2, and 4

Item Analysis

Verb	Determine
Using or Including	NA
Concept	Perimeter of Polygons
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

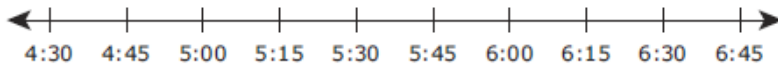
Notes

TEKS 3.7C Supporting Standard

determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes

ITEM

3 Thomas put a ham in the oven at 4:45 P.M. After 15 minutes he put a cake in the oven. The ham and the cake were in the oven together for 60 minutes. Then Thomas took them both out of the oven.



At what time did Thomas take both the ham and cake out of the oven?

- A 5:45 P.M.
- B 6:30 P.M.
- C 5:15 P.M.
- D 6:00 P.M.

Item Analysis

Verb	Determine
Using or Including	Tools (Number Line)
Concept	Addition of Time Intervals
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.7D Supporting Standard

determine when it is appropriate to use measurements of liquid volume (capacity) or weight

ITEM

9 Patrick's class collected boxes of food for charity. Which unit of measurement should be used to measure the weight of the boxes of food?

- A Quarts
- B Pounds
- C Gallons
- D Fluid ounces


Item Analysis


Verb	Determine
Using or Including	NA
Concept	Weight
Process TEKS	3.1A, 3.1B, 3.1C, 3.1G


Notes


TEKS 3.4C Supporting Standard
determine the value of a collection of coins and bills

29 Charlie emptied his piggy bank and counted \$5.63 in savings. Which set of bills and coins could not be the total amount of money that was in Charlie's piggy bank?

A 

B 

C 

D 

Item Analysis	
Verb	Determine
Using or Including	NA
Concept	Value of Coins and Bills
Process TEKS	3.1A, 3.1B, 3.1C, 3.1D, 3.1F
Notes	

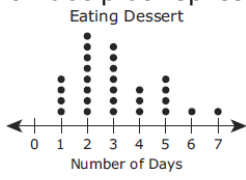
TEKS 3.8A Readiness Standard
summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals

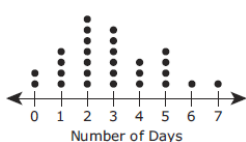
5 The frequency table shows the results of a survey about how many days per week some families eat dessert.

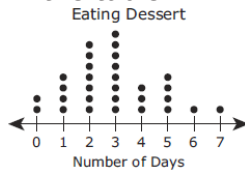
Eating Dessert

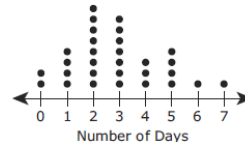
Number of Days	Frequency
0	II
1	IIII
2	IIII III
3	IIII II
4	IIII
5	IIII
6	I
7	I

Which dot plot represents the data in the table?

A 

B 

C 

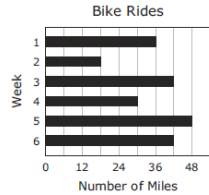
D 

Item Analysis	
Verb	Summarize
Using or Including	Frequency Table Dot Plot
Concept	Data Set with Multiple Categories
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F
Notes	

TEKS 3.8A Readiness Standard

summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals

36 The graph below shows the number of miles Lincoln rode his bike during six weeks.



Which table represents the information in the graph?

F

Week	Number of Miles
1	36
2	14
3	38
4	26
5	48
6	38

H

Week	Number of Miles
1	36
2	18
3	42
4	30
5	42
6	48

G

Week	Number of Miles
1	36
2	24
3	48
4	36
5	48
6	48

J

Week	Number of Miles
1	36
2	18
3	42
4	30
5	48
6	42

Item Analysis

Verb	Summarize
Using or Including	Bar Graph Table
Concept	Data Set with Multiple Categories
Process TEKS	3.1A, 3.1B, 3.1D, 3.1F

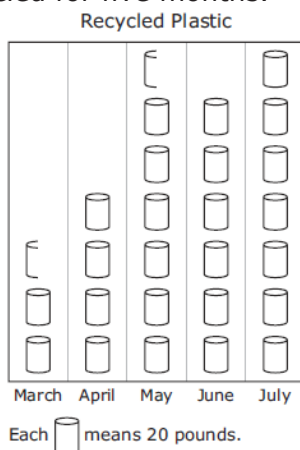
Notes

TEKS 3.8B Supporting Standard

solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals

ITEM

23 The graph below shows the number of pounds of plastic the Keller family recycled for five months.



Based on the graph, how many more pounds of plastic did the family recycle in July than in April?

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

Item Analysis

Verb	Solve
Using or Including	Pictograph
Concept	One-Step
Process TEKS	3.1A, 3.1B, 3.1E, 3.1F

Notes

TEKS 3.9A Supporting Standard
explain the connection between human capital/labor and income

<p>ITEM</p> <p>43 A city pays each police officer for the work the police officer does. Which factor would most likely not affect the amount of money this city pays a police officer?</p> <p>A The size of the police officer’s family</p> <p>B The number of years the police officer has worked for the city</p> <p>C The special skills that the police officer has</p> <p>D The level of education that the police officer has</p>	Item Analysis	
	Verb	Explain
	Using or Including	NA
	Concept	Labor and Income
	Process TEKS	3.1A, 3.1B, 3.1G
Notes		

TEKS 3.9D Supporting Standard
explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower’s responsibility to pay it back to the lender, usually with interest

<p>ITEM</p> <p>15 Mrs. Williams borrowed \$6,000 from a bank to pay for some home repairs. She paid \$7,500 back to the bank. Which of these is the most likely reason Mrs. Williams paid the bank more than the amount she borrowed?</p> <p>A She made a mistake in calculating the amount she needed to pay back.</p> <p>B She actually needed more than \$6,000 for the home repairs.</p> <p>C She had to pay interest on the amount of money she borrowed.</p> <p>D She had to pay sales tax on the amount of money she borrowed.</p>	Item Analysis	
	Verb	Explain
	Using or Including	NA
	Concept	Repayment with Interest
	Process TEKS	3.1A, 3.1B, 3.1G
Notes		

Category 1
Numerical Representations and Relationships
12 Total Questions

TEKS	Item	Correct Answer	Notes
3.2A compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate	13	C	3.1B, 3.1F
	27	A	3.1B, 3.1D, 3.1F
3.2B describe the mathematical relationships found in the base-10 place value system through the hundred thousands place	45	B	3.1B, 3.1G
3.2C represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers	NT		
3.2D compare and order whole numbers up to 100,000 and represent comparisons using the symbols $>$, $<$, or $=$	7	A	3.1A, 3.1B, 3.1E, 3.1F
	38	J	3.1B, 3.1F
3.3A represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines	1	A	3.1A, 3.1B, 3.1D, 3.1F
3.3B determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line	NT		
3.3C explain that the unit fraction $\frac{1}{b}$ represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number	NT		
3.3D compose and decompose a fraction $\frac{a}{b}$ with a numerator greater than zero and less than or equal to b as a sum of parts $\frac{1}{b}$	NT		
3.3E solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8	32	G	3.1A, 3.1B, 3.1E, 3.1F
3.3F represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines	10	H	3.1B, 3.1E, 3.1F
	25	D	3.1A, 3.1B, 3.1E, 3.1F
3.3G explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model	NT		
3.3H compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	16	G	3.1A, 3.1B, 3.1G
	41	B	3.1A, 3.1B, 3.1E, 3.1F
3.4I determine if a number is even or odd using divisibility rules	22	J	3.1B, 3.1G
3.7A represent fractions of halves, fourths, and eighths as distances from zero on a number line	NT		

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 8/12 questions

Category 2
Computations and Algebraic Relationships
18 Total Questions

TEKS	Item	Correct Answer	Notes
3.4A solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction	8	H	3.1A, 3.1B, 3.1F
	35	437	3.1A, 3.1B, 3.1F
	46	J	3.1A, 3.1B, 3.1F
3.4B round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems	33	D	3.1A, 3.1B, 3.1C, 3.1F
3.4D determine the total number of objects when equally sized groups of objects are combined or arranged in arrays up to 10 by 10	NT		
3.4E represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting	21	B	3.1A, 3.1B, 3.1D, 3.1F
3.4F recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts	NT		
3.4G use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties	2	H	3.1A, 3.1B, 3.1F
3.4H determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally	6	H	3.1A, 3.1B, 3.1E, 3.1G
3.4J determine a quotient using the relationship between multiplication and division	18	F	3.1A, 3.1B, 3.1D, 3.1F
3.4K solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts	19	A	3.1A, 3.1B, 3.1F
	37	A	3.1A, 3.1B, 3.1F
3.5A represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations	4	G	3.1A, 3.1B, 3.1D, 3.1F
	28	J	3.1A, 3.1B, 3.1D, 3.1F
3.5B represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations	14	F	3.1A, 3.1B, 3.1D, 3.1F
	24	G	3.1A, 3.1B, 3.1D, 3.1F
3.5C describe a multiplication expression as a comparison such as 3×24 represents 3 times as much as 24	NT		
3.5D determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product	42	H	3.1B, 3.1F
3.5E represent real-world relationships using number pairs in a table and verbal descriptions	12	H	3.1A, 3.1B, 3.1D, 3.1F
	30	H	3.1A, 3.1B, 3.1D, 3.1F
	40	F	3.1A, 3.1B, 3.1D, 3.1G

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 12/18 questions

Category 3
Geometry and Measurement
10 Total Questions

TEKS	Item	Correct Answer	Notes
3.6A classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language	20	J	3.1B, 3.1E, 3.1F
	34	F	3.1A, 3.1B, 3.1E, 3.1G
3.6B use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories	17	C	3.1B, 3.1E, 3.1F
3.6C determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	11	28	3.1A, 3.1B, 3.1E, 3.1F
	39	C	3.1A, 3.1B, 3.1F
3.6D decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area	31	A	3.1A, 3.1B, 3.1E, 3.1F
3.6E decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape	NT		
3.7B determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems	26	G	3.1A, 3.1B, 3.1F
	44	F	3.1A, 3.1B, 3.1E, 3.1F
3.7C determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes	3	D	3.1A, 3.1B, 3.1E, 3.1F
3.7D determine when it is appropriate to use measurements of liquid volume (capacity) or weight	9	B	3.1A, 3.1B, 3.1C, 3.1G
3.7E determine liquid volume (capacity) or weight using appropriate units and tools	NT		

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 6/10 questions

Category 4
Data Analysis and Personal Finance
6 Total Questions

TEKS	Item	Correct Answer	Notes
3.4C determine the value of a collection of coins and bills	29	B	3.1A, 3.1B, 3.1C, 3.1D, 3.1F
3.8A summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals	5	D	3.1A, 3.1B, 3.1D, 3.1F
	36	J	3.1A, 3.1B, 3.1D, 3.1F
3.8B solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals	23	60	3.1A, 3.1B, 3.1E, 3.1F
3.9A explain the connection between human capital/labor and income	43	A	3.1A, 3.1B, 3.1G
3.9B describe the relationship between the availability or scarcity of resources and how that impacts cost	NT		
3.9D explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest	15	C	3.1A, 3.1B, 3.1G
3.9E list reasons to save and explain the benefit of a savings plan, including for college	NT		

Shaded - Readiness TEKS, NT - Not Tested

Readiness TEKS - 2/6 questions