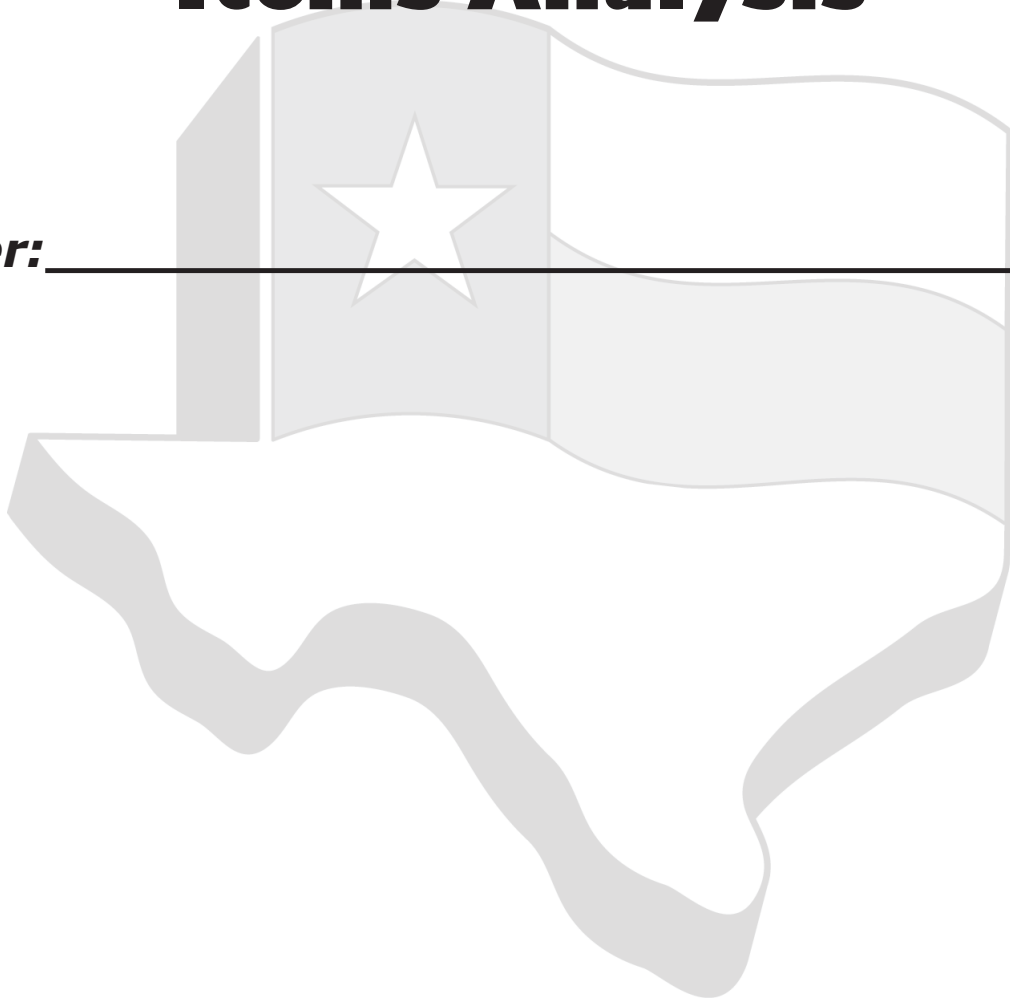


Step Up to the TEKS
by GF Educators, Inc.

Fourth Grade Mathematics

2016 Released Items Analysis

Teacher: _____



Copyright © 2015

Edition I



www.StepUpTEKS.com



4th Grade Mathematics

Released Items

Name: _____

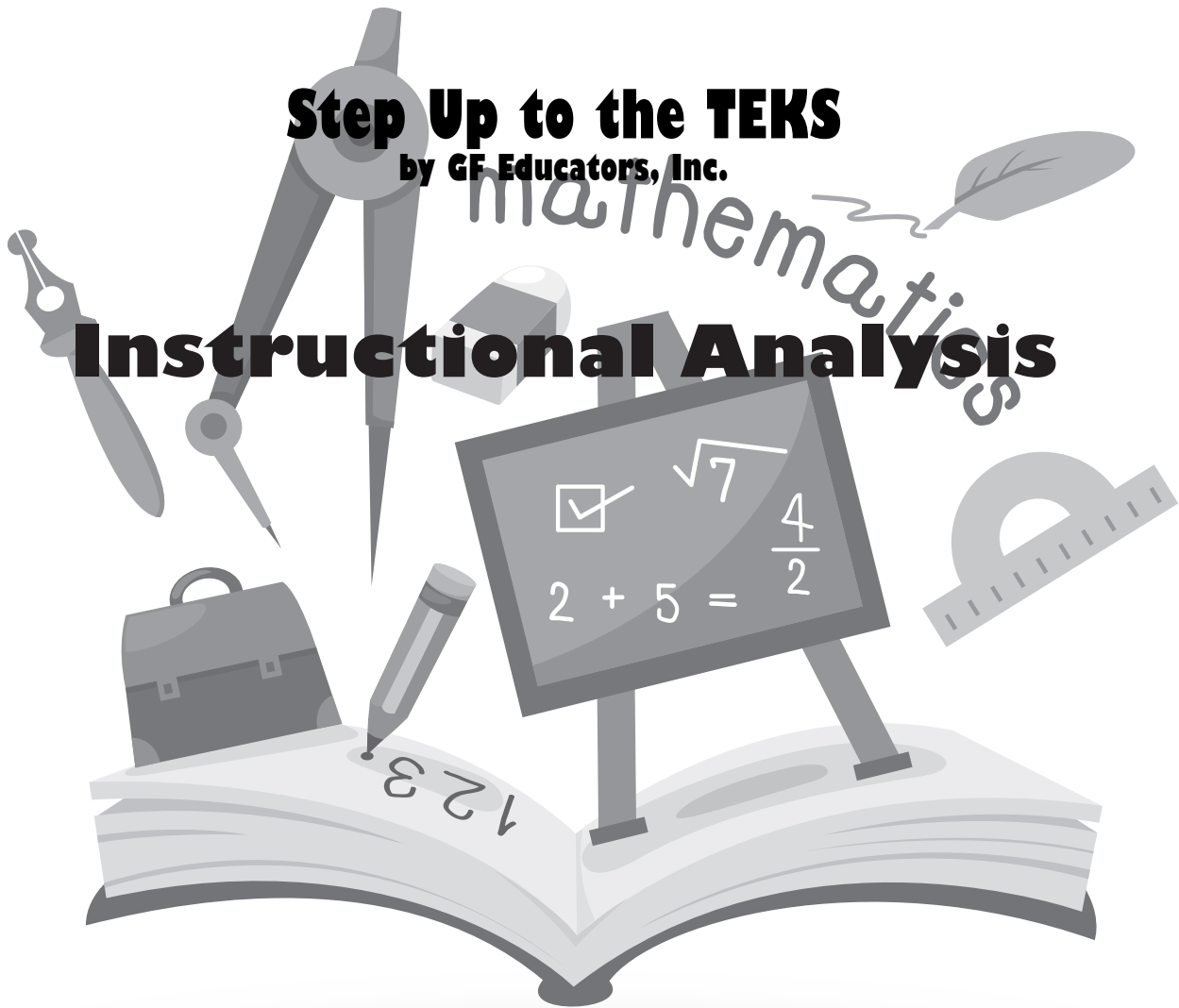
Teacher: _____

Date: _____

Step Up to the TEKS

by GF Educators, Inc.

Instructional Analysis



TEKS 4.2B Readiness Standard

represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals

ITEM

16 Which statement about the number 726,483.19 is true?

- F** The digit 9 has a value of (9×100) .
- G** The digit 4 has a value of (4×100) .
- H** The digit 8 has a value of (8×0.1) .
- J** The digit 2 has a value of (2×10) .

Item Analysis

Verb	Represent
Using or Including	Expanded Notation
Concept	Value of a Digit
Process TEKS	4.1B, 4.1G
Notes	

TEKS 4.2B Readiness Standard

represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals

ITEM

42 In 2008 the total number of cell phone users in Indonesia was about 140,578,000. Which expression has the same value as 140,578,000?

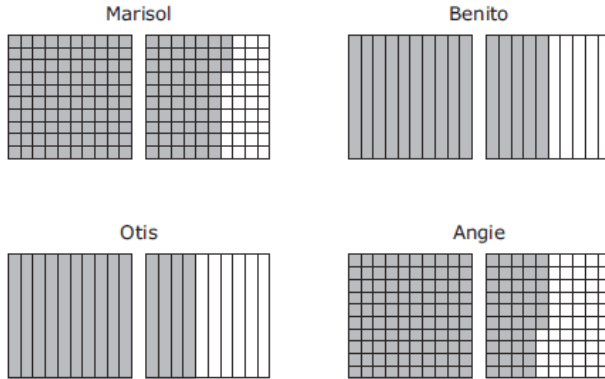
- F** $100,000,000 + 40,000,000 + 5,000,000 + 700,000 + 80,000$
- G** $100,000,000 + 40,000,000 + 500,000 + 70,000 + 8,000$
- H** $10,000,000 + 4,000,000 + 500,000 + 70,000 + 8,000$
- J** $100,000,000 + 40,000,000 + 500 + 70 + 8$

Item Analysis

Verb	Represent
Using or Including	Expanded Notation
Concept	Value of a Digit
Process TEKS	4.1A, 4.1B, 4.1F
Notes	

TEKS 4.2F Supporting Standard
compare and order decimals using concrete and visual models to the hundredths

ITEM 27 The distances in meters that four students jumped are modeled below.



Which list shows these distances in order from greatest to least?

- A 1.46 m 1.5 m 1.4m 1.63 m
- B 1.63 m 1.46 m 1.5 m 1.4 m
- C 1.4 m 1.46 m 1.5 m 1.63 m
- D 1.63 m 1.5 m 1.46 m 1.4 m

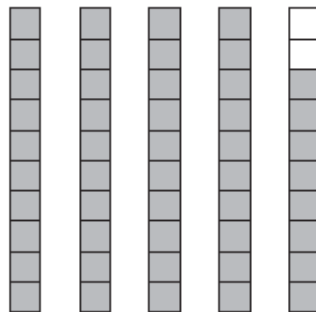
Item Analysis

Verb	Compare and Order
Using or Including	Visual Models to the Hundredths
Concept	Decimals
Process TEKS	4.1A, 4.1B, 4.1E, 4.1F

Notes

TEKS 4.2G Readiness Standard
relate decimals to fractions that name tenths and hundredths

ITEM 1 Estelle shaded the model below to represent the height of a building that is 4.8 meters tall.



Which fraction represents the height of this building in meters?

- A $4 \frac{8}{10}$
- B $\frac{48}{50}$
- C $4 \frac{8}{100}$
- D $\frac{48}{100}$

Item Analysis

Verb	Relate
Using or Including	Tenths
Concept	Decimals to Fractions
Process TEKS	4.1A, 4.1B, 4.1E, 4.1F

Notes

TEKS 4.2G Readiness Standard
relate decimals to fractions that name tenths and hundredths

ITEM 22 Which equation shows an equivalent decimal and fraction?

- F** $12.09 = 12\frac{9}{10}$
- G** $12.09 = 12\frac{9}{100}$
- H** $12.90 = 12\frac{1}{90}$
- J** $12.90 = 12\frac{90}{10}$

Item Analysis

Verb	Relate
Using or Including	Hundredths
Concept	Decimals to Fractions
Process TEKS	4.1B, 4.1F

Notes

TEKS 4.2G Readiness Standard
relate decimals to fractions that name tenths and hundredths

ITEM 36 Mrs. Briones has a pitcher that contains $3\frac{75}{100}$ quarts of lemonade. Which decimal is equivalent to this number?

- F** 3.075
- G** 3.75
- H** 0.375
- J** 300.75

Item Analysis

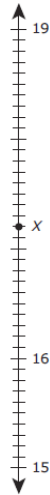
Verb	Relate
Using or Including	Hundredths
Concept	Decimals to Fractions
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.2H Supporting Standard

determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line

48 Point X on the number line below represents the height of a puppy in centimeters.



What measurement does point X represent on the number line?

- F** 16.12 cm
- G** 17.2 cm
- H** 18.8 cm
- J** 17.8 cm

Item Analysis

Verb	Determine
Using or Including	Number Line
Concept	Decimal to a Point
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F

Notes

TEKS 4.3A Supporting Standard

represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$

ITEM

6 The fraction $\frac{3}{8}$ can be represented by this expression.

$$\frac{1}{8} + \frac{1}{8} + \square$$

Which fraction belongs in the \square to complete the expression?

- F** $\frac{2}{8}$
- G** $\frac{3}{8}$
- H** $\frac{1}{8}$
- J** $\frac{1}{16}$

Item Analysis

Verb	Represent
Using or Including	NA
Concept	Sum of Fractions $1/b$
Process TEKS	4.1B, 4.1F

Notes

TEKS 4.3D Readiness Standard
compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$

ITEM

18 Which comparison is true?

- F** $\frac{1}{5} < \frac{2}{4}$
- G** $\frac{2}{3} < \frac{1}{2}$
- H** $\frac{1}{4} < \frac{2}{10}$
- J** $\frac{1}{3} < \frac{2}{7}$

Item Analysis


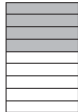
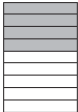
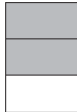

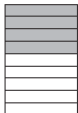
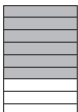
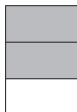
Verb	Compare
Using or Including	Symbols ($<$)
Concept	Fractions Different Numerators/Denominator
Process TEKS	4.1B, 4.1F

Notes

TEKS 4.3D Readiness Standard
compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$

ITEM

44 Sergio completed $\frac{2}{3}$ of a project. Julius completed $\frac{4}{9}$ of an identical project. Each student shaded a model to represent the fraction of the project he completed. Which student completed more of his project?

- F** Sergio completed more, because  $>$ 
- G** Julius completed more, because  $>$ 
- H** Sergio completed more, because  $>$ 
- J** Julius completed more, because  $>$ 

Item Analysis

Verb	Compare
Using or Including	Symbols ($>$)
Concept	Fractions Different Numerators/Denominator
Process TEKS	4.1A, 4.1B, 4.1E, 4.1G

Notes

TEKS 4.3E Readiness Standard
represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations

ITEM

12 Yasmine made waffles for her family.

- $\frac{4}{7}$ of the waffles were blueberry.
- $\frac{1}{7}$ of the waffles were chocolate chip.
- The rest of the waffles did not have blueberries or chocolate chips.

What fraction of the waffles did not have blueberries or chocolate chips?

F $\frac{5}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$

G $\frac{12}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} + \frac{5}{7} = \frac{12}{7}$

H $\frac{3}{7}$, because $\frac{4}{7} - \frac{1}{7} = \frac{3}{7}$

J $\frac{2}{7}$, because $\frac{4}{7} + \frac{1}{7} = \frac{5}{7}$ and $\frac{7}{7} - \frac{5}{7} = \frac{2}{7}$

Item Analysis

Verb

Represent
Solve

Using or Including

Properties of Operations

Concept

Adding Fractions

Process TEKS

4.1A, 4.1B, 4.1G

Notes

TEKS 4.3E Readiness Standard
represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations

ITEM

39 Mrs. Bernstein used parts of two identical rolls of paper to wrap packages. The models are shaded to represent the part of each roll of paper she used.



What fraction of the rolls of paper did Mrs. Bernstein use to wrap the packages?

A $\frac{1}{6}$

B $1\frac{3}{6}$

C $\frac{3}{6}$

D $1\frac{1}{6}$

Item Analysis

Verb

Solve

Using or Including

Pictorial Models

Concept

Adding Fractions

Process TEKS

4.1A, 4.1B, 4.1D, 4.1F

Notes

TEKS 4.4A Readiness Standard

add and subtract whole numbers and decimals to the hundredths place using the standard algorithm

ITEM

15 The list shows the number of trees Isaiah planted in three years.

- He planted 521 trees in the first year.
- He planted 387 trees in the second year.
- He planted 438 trees in the third year.

Isaiah wants to plant a total of 2,000 trees. How many more trees does Isaiah need to plant?

- A** 654
- B** 1,346
- C** 874
- D** 764

Item Analysis

Verb	Addition Subtraction
Using or Including	Standard Algorithm
Concept	Whole Numbers
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.4A Readiness Standard

add and subtract whole numbers and decimals to the hundredths place using the standard algorithm

ITEM

34 Jana bought 1 hat and 2 skirts. The hat cost \$28.53, and the skirts cost \$15.88 each. What was the total cost in dollars and cents of the items Jana bought?

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

Item Analysis

Verb	Addition
Using or Including	Standard Algorithm
Concept	Decimals to the Hundredths Place
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.4B Supporting Standard

determine products of a number and 10 or 100 using properties of operations and place value understandings



ITEM

5 A number sentence is shown below.



$$\diamond \times 10 = \bigcirc$$

Which table shows numbers that make the number sentence true?



A

	
44	54
66	76
99	109
150	160



C

	
44	4,400
66	6,600
99	9,900
150	15,000

B

	
44	440
66	660
99	990
150	1,500

D

	
44	404
66	606
99	909
150	1,050

Item Analysis

Verb

Determine

Using or Including

Place Value Understandings

Concept

Products of 10

Process TEKS

4.1B, 4.1D, 4.1F

Notes

TEKS 4.4D Supporting Standard

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

ITEM

7 A basketball team plays 82 games each year. How many games will the team play in 25 years?

- A** 1,050
- B** 2,040
- C** 2,090
- D** 2,050

Item Analysis

Verb

Use

Using or Including

Strategies

Concept

Multiply Two-Digit by Two-Digit

Process TEKS

4.1A, 4.1B, 4.1F

Notes

TEKS 4.4F Supporting Standard
use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor

ITEM

30 There are 1,092 people who work in an office building. The building has 4 floors, and the same number of people work on each floor. How many people work on each floor?

- F** 273
- G** 223
- H** 373
- J** 348

Item Analysis

Verb	Use
Using or Including	Standard Algorithm
Concept	Four-Digit by One-Digit
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.4G Supporting Standard
round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers

ITEM

32 Jorge swam a total of 173 minutes during 3 days. He swam the same number of minutes each day. Which of the following is the best estimate of the number of minutes Jorge swam each day?

- F** 60
- G** 40
- H** 20
- J** 30

Item Analysis

Verb	Round
Using or Including	NA
Concept	Nearest 10 Whole Numbers
Process TEKS	4.1A, 4.1B, 4.1C, 4.1F

Notes

TEKS 4.4H Readiness Standard
solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders

ITEM

2 Eric has 158 action figures to put in display cases. Each display case can hold 8 action figures. How many cases does Eric need to hold all his action figures?

- F** 18
- G** 20
- H** 19
- J** 21

Item Analysis

Verb	Solve
Using or Including	NA
Concept	One-Step Division
Process TEKS	4.1A, 4.1B, 4.1F
Notes	

TEKS 4.4H Readiness Standard
solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders

ITEM

28 Diane worked 18 hours each week during the summer. She worked a total of 8 weeks and earned \$9 an hour. How much money did Diane earn during the summer?

- F** \$306
- G** \$1,296
- H** \$156
- J** \$1,386

Item Analysis

Verb	Solve
Using or Including	NA
Concept	Two-Step Multiplication
Process TEKS	4.1A, 4.1B, 4.1F
Notes	

TEKS 4.4H Readiness Standard

solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders

ITEM

45 Mr. Conrad makes chess pieces. A chess club ordered a set of chess pieces for each of its members.

- Each set has 32 chess pieces.
- There are 27 members of the chess club.
- Mr. Conrad put these chess pieces in 6 boxes with the same number of pieces in each box.

How many chess pieces did Mr. Conrad put in each box?

- A** 864
- B** 192
- C** 354
- D** 144

Item Analysis

Verb	Solve
Using or Including	NA
Concept	Two-Step Multiplication and Division
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.5A Readiness Standard

represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity

ITEM

10 A factory makes 400 refrigerators every day. The factory makes 125 more stoves per day than refrigerators. Which equation can be used to find x , the total number of refrigerators and stoves the factory makes in one day?

- F** $x = 400 + 400 + 125$
- G** $x = 400 + 125$
- H** $x = 400 + 400 - 125$
- J** $x = 400 - 125$

Item Analysis

Verb	Represent
Using or Including	Equations Letter for Unknown
Concept	Multi-Step with Whole Numbers
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F

Notes

TEKS 4.5A Readiness Standard
represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity

ITEM 21 Mark had 45 football cards. Josh had twice as many football cards as Mark. Josh then bought 5 more football cards. Which equation can be used to find f , the number of football cards Josh has now?

A $2 \times 45 + 5 = f$
B $2 \times 45 - 5 = f$
C $2 + 45 \times 5 = f$
D $2 + 45 + 5 = f$

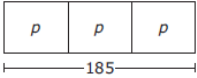
Item Analysis	
Verb	Represent
Using or Including	Equations Letter for Unknown
Concept	Multi-Step Whole Numbers
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F
Notes	

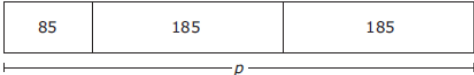
TEKS 4.5A Readiness Standard
represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity

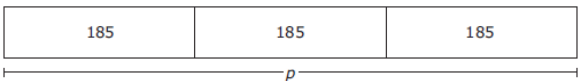
ITEM 37 Sabra read a total of 185 pages in three days.

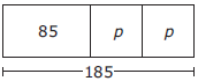
- On the first day, she read 85 pages.
- On the second and third days, she read the same number of pages.

Which diagram shows a way to find p , the number of pages Sabra read on the third day?

A 

B 

C 

D 

Item Analysis	
Verb	Represent
Using or Including	Strip Diagram
Concept	Multi-Step Whole Numbers
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F
Notes	

TEKS 4.5B Readiness Standard

represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence

24 A number pattern begins with the values shown.
8, 16, 24, 32, ...

Which table correctly represents the relationship between the position of a number in the pattern and the value of that number?

F

Position	Numerical Expression	Value
1	$1 + 8$	9
2	$2 + 8$	10
3	$3 + 8$	11
4	$4 + 8$	12

G

Position	Numerical Expression	Value
8	$8 + 0$	8
16	$16 + 0$	16
24	$24 + 0$	24
32	$32 + 0$	32

H

Position	Numerical Expression	Value
1	1×8	8
2	2×8	16
3	3×8	24
4	4×8	32

J

Position	Numerical Expression	Value
8	8×1	8
16	16×1	16
24	24×1	24
32	32×1	32

Item Analysis

Verb

Represent

Using or Including

Input-Output Table
Numerical Expression

Concept

Value in a Sequence and
Position in the Sequence

Process TEKS

4.1B, 4.1D, 4.1F

Notes

TEKS 4.5B Readiness Standard

represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence

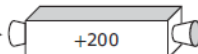
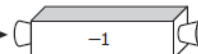
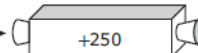
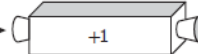
ITEM

47 The table shows a relationship between the input numbers and the output numbers generated by a number machine.

Number Machine

Input	Output
1	251
2	252
3	253
4	254

Which number machine shows the same relationship as the one shown in the table?

- A** Input →  → Output
- B** Input →  → Output
- C** Input →  → Output
- D** Input →  → Output

Item Analysis

Verb

Represent

Using or Including

Input-Output Table

Concept

Number Pattern

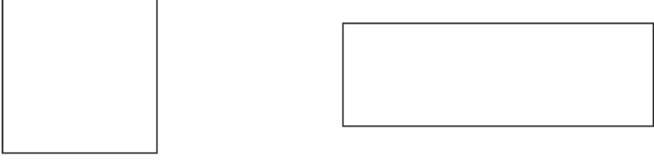
Process TEKS

4.1B, 4.1D, 4.1F

Notes

TEKS 4.5D Readiness Standard
solve problems related to perimeter and area of rectangles where dimensions are whole numbers

ITEM
8 Use the ruler provided to measure the length and width of each rectangle to the nearest centimeter.



What is the difference between the perimeters of these rectangles in centimeters?

F 3 cm, because $6 - 3 = 3$
G 2 cm, because $8 - 6 = 2$
H 4 cm, because $16 - 12 = 4$
J 1 cm, because $9 - 8 = 1$

Item Analysis	
Verb	Solve
Using or Including	NA
Concept	Perimeter
Process TEKS	4.1B, 4.1C, 4.1E, 4.1G
Notes	

TEKS 4.5D Readiness Standard
solve problems related to perimeter and area of rectangles where dimensions are whole numbers

ITEM
17 Sebastian had a rectangular piece of paper that was 90 mm long and 50 mm wide. He cut the paper in half. What is the area of each half of the paper in square millimeters?

A 4,500 square millimeters
B 9,000 square millimeters
C 2,250 square millimeters
D 1,125 square millimeters

Item Analysis	
Verb	Solve
Using or Including	NA
Concept	Area
Process TEKS	4.1A, 4.1B, 4.1C, 4.1F
Notes	

TEKS 4.5D Readiness Standard

solve problems related to perimeter and area of rectangles where dimensions are whole numbers

ITEM

33 A rug shaped like a rectangle has a width of 3 m. The length of the rug is 2 m greater than its width. What is the perimeter of the rug in meters?

- A** 10 m
- B** 16 m
- C** 8 m
- D** 15 m

Item Analysis

Verb	Solve
Using or Including	NA
Concept	Perimeter
Process TEKS	4.1A, 4.1B, 4.1C, 4.1F

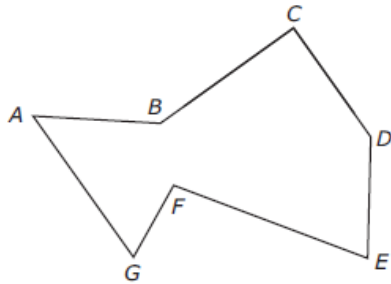
Notes

TEKS 4.6A Supporting Standard

identify points, lines, line segments, rays, angles, and perpendicular and parallel lines

ITEM

40 A figure is shown below.



Which two line segments appear to be perpendicular?

- F** Line segments AG and CD
- G** Line segments BC and CD
- H** Line segments DE and EF
- J** Line segments AG and FG

Item Analysis

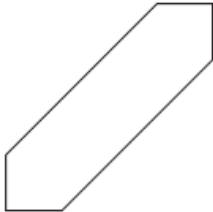
Verb	Identify
Using or Including	NA
Concept	Perpendicular Lines
Process TEKS	4.1B, 4.1E, 4.1F

Notes

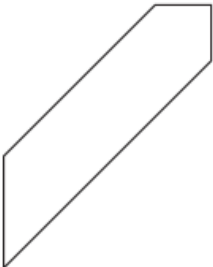
TEKS 4.6B Supporting Standard
identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure

ITEM 11 Which figure appears to have exactly 1 line of symmetry?

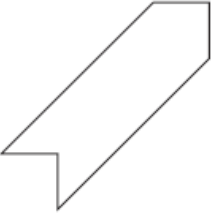
A



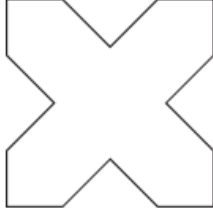
C



B



D




Item Analysis	
Verb	Identify
Using or Including	NA
Concept	Lines of Symmetry
Process TEKS	4.1B, 4.1E, 4.1F
Notes	


TEKS 4.6C Supporting Standard
apply knowledge of right angles to identify acute, right, and obtuse triangles

ITEM 20 Which triangle appears to be an acute triangle?

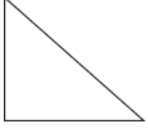
F




G



H



J



Item Analysis	
Verb	Apply
Using or Including	NA
Concept	Acute Triangle
Process TEKS	4.1B, 4.1E, 4.1F
Notes	

TEKS 4.6D Readiness Standard
classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size

ITEM

14 Liza drew a figure on the front of her notebook that has two obtuse angles. Which figure could be the one Liza drew?

- F** Rectangle
- G** Obtuse triangle
- H** Parallelogram
- J** Right triangle

Item Analysis

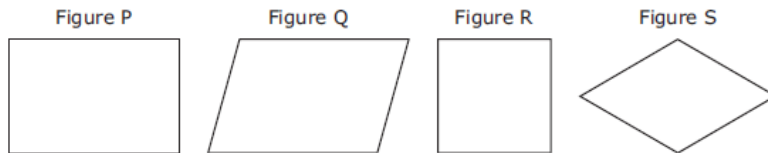
Verb	Classify
Using or Including	Obtuse Angles
Concept	Two-Dimensional Figures
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.6D Readiness Standard
classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size

ITEM

43 Four figures are shown.



Which figures appear to be rectangles?

- A** Figures Q and S
- B** Figures R and S
- C** Figures P and R
- D** Figures P and Q

Item Analysis

Verb	Classify
Using or Including	NA
Concept	Two-Dimensional Figures
Process TEKS	4.1B, 4.1E, 4.1F

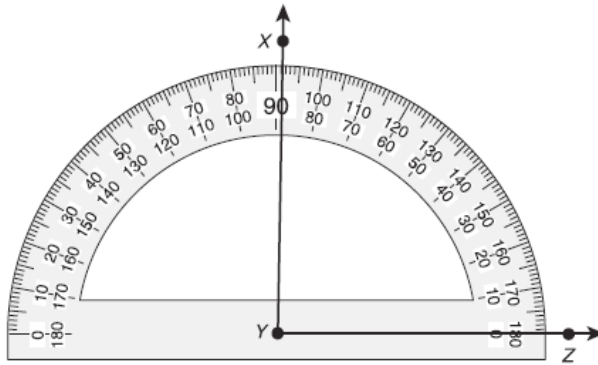
Notes

TEKS 4.7C Readiness Standard

determine the approximate measures of angles in degrees to the nearest whole number using a protractor

ITEM

23 What is the measure of angle XYZ to the nearest degree?



- A 180°
- B 109°
- C 91°
- D 89°

Item Analysis

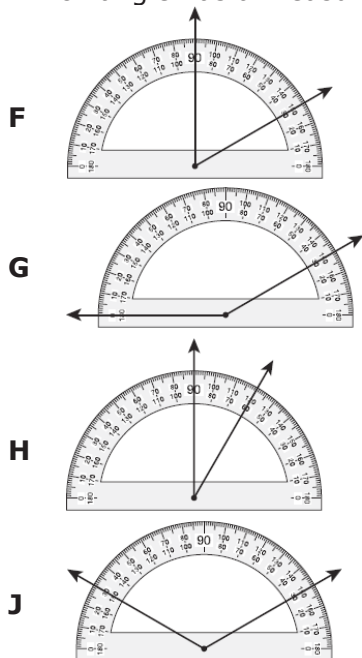
Verb	Determine
Using or Including	Protractor
Concept	Measure of an Angle
Process TEKS	4.1B, 4.1C, 4.1E, 4.1F

Notes

TEKS 4.7C Readiness Standard

determine the approximate measures of angles in degrees to the nearest whole number using a protractor

46 Which angle has a measure closest to 30°?



Item Analysis

Verb	Determine
Using or Including	Protractor
Concept	Measure of an Angle
Process TEKS	4.1B, 4.1C, 4.1E, 4.1F

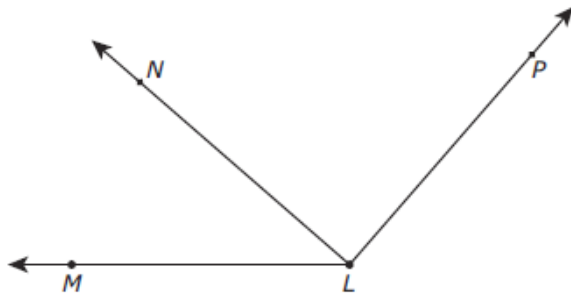
Notes

TEKS 4.7E Supporting Standard

determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures

ITEM

3 Angle MLN has a measure of 41° . Angle NLP is a right angle.



What is the measure of angle MLP?

- A 82°
- B 49°
- C 180°
- D 131°

Item Analysis

Verb	Determine
Using or Including	NA
Concept	Measure of an Unknown Angle
Process TEKS	4.1B, 4.1E, 4.1F

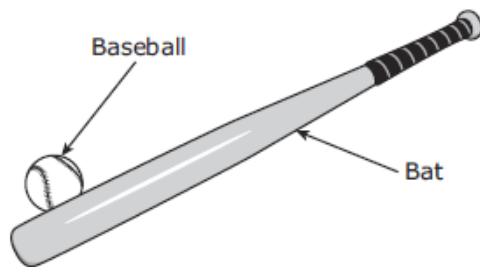
Notes

TEKS 4.8A Supporting Standard

identify relative sizes of measurement units within the customary and metric systems

ITEM

35 Garrett has a baseball and a bat like the ones shown in the picture.



Which measurement best describes the length of the bat?

- A 35 in.
- B 35 m
- C 35 ft
- D 35 mm

Item Analysis

Verb	Identify
Using or Including	NA
Concept	Relative Sizes of Measurement
Process TEKS	4.1A, 4.1B, 4.1F

Notes

TEKS 4.8B Supporting Standard
convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table

<p>ITEM 26 The distance between Henry’s house and his school is 648 feet. How many yards are equivalent to 648 feet?</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	Convert
	Using or Including	Customary
	Concept	Measurement (Smaller to Larger)
	Process TEKS	4.1A, 4.1B, 4.1C, 4.1F
Notes		

TEKS 4.8C Readiness Standard
solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate

<p>ITEM 19 A geyser is an underground hot spring that shoots water and steam into the air. At Yellowstone National Park there is a geyser that erupts once every 44 to 125 minutes. If the geyser erupted one day at 1:04 P.M., at which time could the geyser erupt next?</p> <p>A 1:44 P.M. B 3:29 P.M. C 3:05 P.M. D 1:25 P.M.</p>	Item Analysis	
	Verb	Solve
	Using or Including	Addition
	Concept	Intervals of Time
	Process TEKS	4.1A, 4.1B, 4.1F
Notes		



TEKS 4.8C Readiness Standard
 solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate

ITEM 38 Tyra opened a new bag of birdseed and filled 3 bird feeders. She put 2,500 grams of birdseed into each feeder. There were 1,500 grams of birdseed left in the bag. What was the mass of the bag of birdseed in kilograms before Tyra opened it?

F 4 kg
G 4,000 kg
H 9 kg
J 9,000 kg

Item Analysis	
Verb	Solve
Using or Including	Addition
Concept	Mass
Process TEKS	4.1A, 4.1B, 4.1C, 4.1F
Notes	

ITEM

Item Analysis	
Verb	
Using or Including	
Concept	
Process TEKS	
Notes	

TEKS 4.9A Readiness Standard
represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions

4 The list shows the lengths of twelve strings in inches.
26, 30, 19, 21, 24, 26, 18, 31, 27, 21, 17, 29
Which plot represents the data in the list?

F

String Lengths

Inches

G

String Lengths

Inches

H

String Lengths

Stem	Leaf
1	7 8 9
2	1 1 4 6 6 7 9
3	1

1|8 means 18 inches.

J

String Lengths

Stem	Leaf
1	7 8 9
2	1 1 4 6 6 7 9
3	0 1

1|8 means 18 inches.

Item Analysis	
Verb	Represent
Using or Including	Data Whole Numbers
Concept	Dot Plot Stem-Leaf Plot
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F
Notes	

TEKS 4.9A Readiness Standard
represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions

41 A candy store sells fudge by the pound. The dot plot shows the number of customers who bought different numbers of pounds of fudge on Saturday.

Fudge Sold on Saturday

Weight (lb)

Which frequency table represents the same data shown on the dot plot?

A

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III		IIII	II	III		I

B

Fudge Sold on Saturday

Weight (lb)	1	4	2	3	0	4	2	3	0	1
Tally	I	IIII	II	III		IIII	II	III		I

C

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III	I	IIII	II	III	I	I

D

Fudge Sold on Saturday

Weight (lb)	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5
Tally	I	IIII	II	III	IIII	II	III	I		

Item Analysis	
Verb	Represent
Using or Including	Data Fractions
Concept	Dot Plot Frequency Table
Process TEKS	4.1A, 4.1B, 4.1D, 4.1F
Notes	

TEKS 4.9B Supporting Standard

solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot

ITEM

13 The frequency table shows the favorite school lunches of some students. The table is missing the information for the number of students who chose a hamburger.

Favorite School Lunches

Lunch Choice	Tally	Frequency
Pizza	 	32
Hamburger		
Chicken		13

The number of students who chose a hamburger is half the number of students who chose pizza. How many students chose a hamburger or chicken as their favorite school lunch?

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	Frequency Table
Concept	Two-Step Problem
Process TEKS	4.1A, 4.1B, 4.1E, 4.1F

Notes

TEKS 4.10A Supporting Standard

distinguish between fixed and variable expenses

ITEM

29 Some people borrow money to buy cars. They have to make car payments to pay back the money they borrowed. What kind of expenses are most car payments?

- A** Variable expenses, because the amount usually changes every month
- B** Variable expenses, because the payment is not due every month
- C** Fixed expenses, because the amount is usually the same every month
- D** Fixed expenses, because the car is usually paid for after one month

Item Analysis

Verb	Distinguish
Using or Including	NA
Concept	Fixed and Variable Expenses
Process TEKS	4.1A, 4.1B, 4.1G

Notes



TEKS 4.10B Supporting Standard
calculate profit in a given situation

<p>ITEM 25 Gwen bought an old table. She repaired it and painted it so that it looked new. Then she sold the table. Gwen made this list about what she did.</p> <ul style="list-style-type: none"> • Price paid for old table: \$10.00 • Cost to repair: \$5.00 • Cost to paint: \$7.50 • Selling price: \$50.00 <p>What was Gwen’s profit from selling the table?</p> <p>A \$27.50 B \$50.00 C \$22.50 D \$40.00</p>	Item Analysis	
	Verb	Calculate
	Using or Including	NA
	Concept	Profit
	Process TEKS	4.1A, 4.1B, 4.1F
Notes		

TEKS

<p>ITEM</p>	Item Analysis	
	Verb	
	Using or Including	
	Concept	
	Process TEKS	
Notes		

Category 1
Numerical Representations and Relationships
12 Total Questions

TEKS	Item	Correct Answer	Process TEKS
4.2A interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left	NT		
4.2B represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	16	G	4.1B, 4.1G
	42	G	4.1A, 4.1B, 4.1F
4.2C compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, or $=$	9	B	4.1A, 4.1B, 4.1E, 4.1F
4.2D round whole numbers to a given place value through the hundred thousands place	NT		
4.2E represent decimals, including tenths and hundredths, using concrete and visual models and money	31	C	4.1B, 4.1C, 4.1E, 4.1F
4.2F compare and order decimals using concrete and visual models to the hundredths	27	D	4.1A, 4.1B, 4.1E, 4.1F
4.2G relate decimals to fractions that name tenths and hundredths	1	A	4.1A, 4.1B, 4.1E, 4.1F
	22	G	4.1B, 4.1F
	36	G	4.1A, 4.1B, 4.1F
4.2H determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line	48	G	4.1A, 4.1B, 4.1D, 4.1F
4.3A represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$	6	H	4.1B, 4.1F
4.3B decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations	NT		
4.3C determine if two given fractions are equivalent using a variety of methods	NT		
4.3D compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$	18	F	4.1B, 4.1F
	44	F	4.1A, 4.1B, 4.1E, 4.1G
4.3G represent fractions and decimals to the tenths or hundredths as distances from zero on a number line	NT		

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 7/12 questions

Category 2
Computations and Algebraic Relationships
16 Total Questions

TEKS	Item	Correct Answer	Process TEKS
4.3E represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations	12	J	4.1A, 4.1B, 4.1G
	39	D	4.1A, 4.1B, 4.1D, 4.1F
4.3F evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1, referring to the same whole	NT		
4.4A add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	15	A	4.1A, 4.1B, 4.1F
	34	60.29	4.1A, 4.1B, 4.1F
4.4B determine products of a number and 10 or 100 using properties of operations and place value understandings	5	B	4.1B, 4.1D, 4.1F
4.4C represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15	NT		
4.4D use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties	7	D	4.1A, 4.1B, 4.1F
4.4E represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations	NT		
4.4F use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor	30	F	4.1A, 4.1B, 4.1F
4.4G round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers	32	F	4.1A, 4.1B, 4.1C, 4.1F
4.4H solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders	2	G	4.1A, 4.1B, 4.1F
	28	G	4.1A, 4.1B, 4.1F
	45	D	4.1A, 4.1B, 4.1F
4.5A solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders	10	F	4.1A, 4.1B, 4.1D, 4.1F
	21	A	4.1A, 4.1B, 4.1D, 4.1F
	37	D	4.1A, 4.1B, 4.1D, 4.1F
4.5B represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence	24	H	4.1B, 4.1D, 4.1F
	47	C	4.1B, 4.1D, 4.1F

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 12/16 questions

Category 3
Geometry and Measurement
15 Total Questions

TEKS	Item	Correct Answer	Process TEKS
4.5D solve problems related to perimeter and area of rectangles where dimensions are whole numbers	8	H	4.1B, 4.1C, 4.1E, 4.1G
	17	C	4.1A, 4.1B, 4.1C, 4.1F
	33	B	4.1A, 4.1B, 4.1C, 4.1F
4.6A identify points, lines, line segments, rays, angles, and perpendicular and parallel lines	40	G	4.1B, 4.1E, 4.1F
4.6B identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure	11	B	4.1B, 4.1E, 4.1F
4.6C apply knowledge of right angles to identify acute, right, and obtuse triangles	20	G	4.1B, 4.1E, 4.1F
4.6D classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size	14	H	4.1A, 4.1B, 4.1F
	43	C	4.1B, 4.1E, 4.1F
4.7C determine the approximate measures of angles in degrees to the nearest whole number using a protractor	23	D	4.1B, 4.1C, 4.1E, 4.1F
	46	H	4.1B, 4.1C, 4.1E, 4.1F
4.7D draw an angle with a given measure	NT		
4.7E determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures	3	D	4.1B, 4.1E, 4.1F
4.8A identify relative sizes of measurement units within the customary and metric systems	35	A	4.1A, 4.1B, 4.1F
4.8B convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table	26	216	4.1A, 4.1B, 4.1C, 4.1F
4.8C solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	19	C	4.1A, 4.1B, 4.1F
	38	H	4.1A, 4.1B, 4.1C, 4.1F

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 9/15 questions

Category 4
Data Analysis and Personal Finance
5 Total Questions

TEKS	Item	Correct Answer	Process TEKS
4.9A represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	4	J	4.1A, 4.1B, 4.1D, 4.1F
	41	A	4.1A, 4.1B, 4.1D, 4.1F
4.9B solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot	13	29	4.1A, 4.1B, 4.1E, 4.1F
4.10A distinguish between fixed and variable expenses	29	C	4.1A, 4.1B, 4.1G
4.10B calculate profit in a given situation	25	A	4.1A, 4.1B, 4.1F
4.10E describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	NT		

Shaded - Readiness TEKS, NT - Not Tested
 Readiness TEKS - 2/5 questions