

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

MATH.5.2A Represent the value of the digit in decimals through the thousandths using expanded notation and numerals.

5 A bank received a check for two thousand six hundred nine dollars and seventy-five cents. How is this number written in expanded notation?

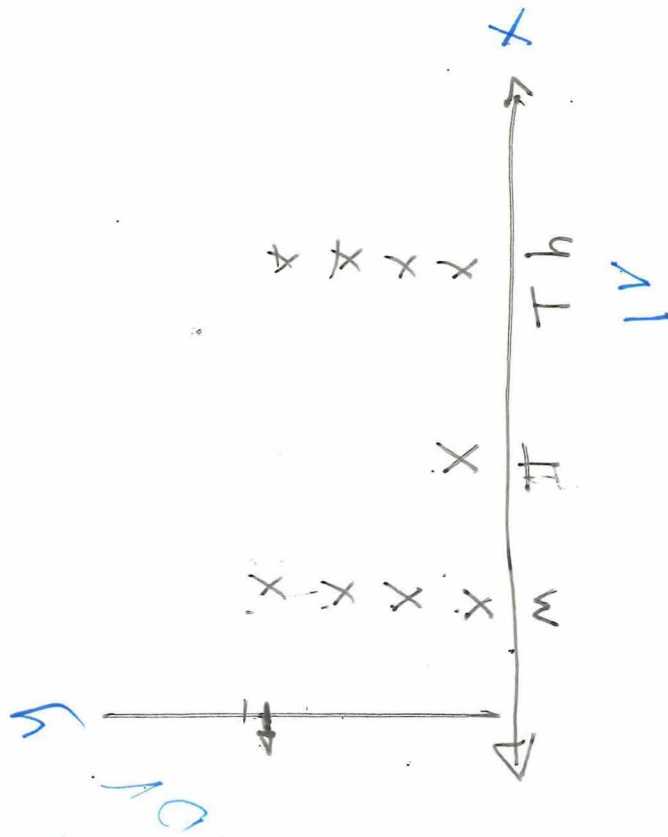
~~A~~ $(2 \times 1,000) + (6 \times 100) + (9 \times 10) + (7 \times 0.01) + (5 \times 0.01)$

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

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

D $(2 \times 1,000) + (6 \times 100) + (9 \times 1) + (7 \times 0.01) + (5 \times 0.001)$

Released 2016 Sample Q5



Grading Criteria:

- Remember to use your strategies to answer word problems:
 - around important numbers
 - around operations
 - ~ under questions
- Show your workings
- Select an answer & any corrections

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

© MATH.5.2C Round decimals to tenths or hundredths.

What is 0.64 rounded to the tenths place?

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

Question from OTEA release tests with permission

0.60

18 Mr. Avalos has 9.375 liters of paint. What is this number rounded to the nearest hundredth?

F 9.40

G 9.38

H 9.37

J 9.47

Question from OTEA release tests with permission

9.375
= 9.38

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

Ⓜ MATH.5.2B Compare and order two decimals to thousandths and represent comparisons using the symbols $>$, $<$, or $=$.

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

Race Times				
Swimmer	One	Two	Three	Four
Time (seconds)	26.15	26.5	26.1	26.05

Which inequality correctly compares two of these race times?

- ☐ F $26.5 > 26.05$
☐ G $26.15 < 26.5$
☐ H $26.1 < 26.05$
☐ J $26.15 < 26.1$

$>$
 $<$
 Equal =

23 Joshua compared the values of these decimals.

0.06 0.6 0.006 0.060

Which statement correctly compares two of these numbers?

- ☒ A $0.6 < 0.060$
☐ B $0.006 > 0.600$
☐ C $0.6 > 0.060$
☒ D $0.060 = 0.060$

0.60000000
 $= 0.6$

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



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

- ☐ F 419.018
☐ G 417.97
☐ H 418.537
☒ J 418.63

417.309 | least
 417.970
 418.537
 → 418.630
 419.018 | greatest

1 The table shows the masses of four rocks.

Rocks	
Rock	Mass (kg)
S	0.429
T	0.438
U	0.43
V	0.483

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

- ☐ A $0.429 > 0.438$
☒ B $0.438 < 0.483$
☐ C $0.429 > 0.43$
☐ D $0.438 = 0.43$



2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

® MATH.5.3K Add and subtract positive rational numbers fluently.

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

F 84,697.7 mi

G 85,302.7 mi

H 89,124.3 mi

J 90,134.3 mi

$$\begin{array}{r} 87,416.0 \\ - 2,718.3 \\ \hline 84,697.7 \end{array}$$

Question from OTEA, please use with permission

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

A \$15.57

B \$24.43

C \$17.77

D \$16.57

$$\begin{array}{r} \$2.86 \\ + 1.57 \\ \hline 4.43 \end{array}$$

$$\begin{array}{r} \$20.00 \\ - 4.43 \\ \hline 15.57 \end{array}$$

Question from OTEA, please use with permission

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

A \$13.03

B \$14.03

C \$14.53

D \$13.83

$$\begin{array}{r} \$12.30 \\ - .75 \\ \hline 11.55c \end{array}$$

$$\begin{array}{r} + 1.48 \\ \hline \$13.03 \end{array}$$

Step 1

Step 2

Question from OTEA, please use with permission

- 24 The table shows the population of three Texas counties. The population of Gray County is missing.

Population

County	Population
Anderson	58,308
Dallas	2,416,014
Brazos	197,632
Gray	

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

F 2,694,709

G 2,707,507

H 2,695,209

J 2,765,815

$$\begin{array}{r} \text{Anderson } 58,308 \\ \text{gray } - 35,553 \\ \hline \end{array}$$

$$\begin{array}{r} 22,755 \\ 58,308 \\ 2,416,014 \\ 197,632 \\ + 22,755 \\ \hline 2,694,709 \end{array}$$

Question from OTEA, please use with permission

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

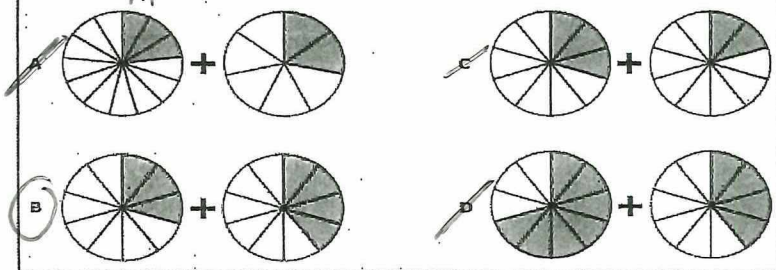
© MATH.5.3H Represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations.

2013 - 15

Which model is shaded to best represent the expression below?

$$\frac{3}{10} + \frac{2}{5}$$

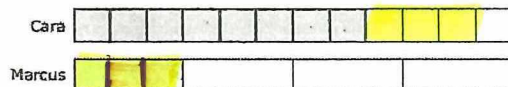
$$\frac{3}{10} + \frac{4}{10}$$



Question from OTEA release test with permission

$$\frac{7}{10}$$

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



$$\frac{5}{8} + \frac{1}{4}$$

Question from OTEA release test with permission

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

F $\frac{11}{12}$

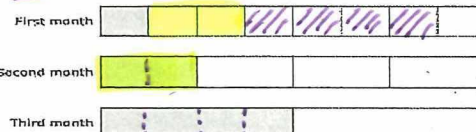
G $\frac{9}{16}$

H $\frac{1}{12}$

J $\frac{9}{24}$

2015 - Sample Q8

8 Mrs. Ali collected notebook paper from her students at the beginning of the school year. The model is shaded to show the fraction of this notebook paper that Mrs. Ali used in each of the three months.



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

A $\frac{3}{8}$

B $\frac{7}{8}$

C $\frac{3}{14}$

D $\frac{1}{8}$

$$\frac{7}{8}$$

$$\frac{1}{8} + \frac{1}{4} + \frac{1}{2}$$

Question from OTEA release test with permission

$$\frac{1}{8} + \frac{1}{4} + \frac{1}{2} = \frac{1}{8} + \frac{2}{8} + \frac{4}{8} = \frac{7}{8}$$

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

© MATH.5.4A Identify prime and composite numbers.

2013 – Q42

Luke made the list of numbers below.

40	41	42	43	44	45	46	47	48	49
----	----	----	----	----	----	----	----	----	----

C P C P C C C P C C

How many of the numbers in Luke's list are prime numbers?

F 3

G 7

H 10

J 5

44 x 1
7 x 7

Created from OIDA release letter with permission

20 Seth's homework assignment is to write factor pairs that contain only composite numbers. Seth wrote four factor pairs for the number 132, as shown below.

C 6 x 22

11 x 12

P 3 x 44

P 2 x 66

All even
except 2
= composite

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

F 6 x 22

G 11 x 12

H 3 x 44

J 2 x 66

Prime: 2 x 1 = 2

3 x 1 = 3

11 x 1 = 11

Created from OIDA release letter with permission

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

© MATH.5.3B Multiply with fluency a three-digit number by a two-digit number using the standard algorithm.

27 A company makes 625 cell phone cases each day. How many cell phone cases does the company make in 31 days?

A 18,375

B 1,490

C 2,500

D 19,375

$$\begin{array}{r} 625 \\ \times 31 \\ \hline 625 \\ 18750 \\ \hline 19375 \end{array}$$

phones/day

Original from OTFL n have test with penkiki

2014 - Q26

An individual computer lab session at a school is 24 minutes long. On Monday 313 students each completed a session at the computer lab. What is the total number of minutes that all these students spent in the computer lab on Monday?

F 337 min

G 7,402 min

H 1,878 min

J Not here

$$\begin{array}{r} 313 \\ \times 24 \\ \hline 1252 \\ 6260 \\ \hline 7512 \end{array}$$

Zero the Hero

7,512 minutes

Original from OTFL n have test with penkiki

2013 - Q15

Brennon has a total of 187 postage stamps.

- He has 48 stamps that are each 14 millimeters wide.
- He has 139 stamps that are each 12 millimeters wide.

What is the total width of these stamps?

A 2,618 mm

B 2,230 mm

C 2,340 mm

D 657 mm

$$(48 \text{ stamps} \times 14 \text{ mm}) + (139 \times 12)$$

$$\begin{array}{r} 139 \\ \times 12 \\ \hline 278 \\ + 1390 \\ \hline 1668 \end{array}$$

Zero the Hero

$$\begin{array}{r} 48 \\ \times 14 \\ \hline 192 \\ + 480 \\ \hline 672 \end{array}$$

$$\begin{array}{r} 1668 \\ + 672 \\ \hline 2340 \text{ mm} \end{array}$$

Review
Expression
Equation
= n.

Original from OTFL n have test with penkiki

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

© MATH.5.3C Solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm.

2013 - Q13

A gardener has 785 bricks to build a path in a garden. There will be 24 bricks in each row of the path. How many complete rows can the gardener make using 785 bricks?

A 32

B 17

C 33

D 65

$$\begin{array}{r} 24 \overline{) 785} \\ \underline{48} \\ 305 \\ \underline{240} \\ 65 \end{array}$$

Question from CTFA release test with permission

2014 - Q50

Wesley has 480 stamps in his collection. He puts these stamps into display cases. Each display case contains 15 stamps. How many display cases does Wesley need for his stamp collection?

F 32

G 212

H 36

J 465

Solution:

480 stamps \div 15 per case.

Question from CTFA release test with permission

33 Tara has a box of 908 beads for making bracelets. She wants to put 15 beads on each bracelet she makes. What is the greatest number of bracelets Tara can make with these beads?

A 61

B 70

C 60

D 68

$$\begin{array}{r} 060 \\ 15 \overline{) 908} \\ \underline{90} \\ 08 \end{array}$$

60 R 8

Question from CTFA release test with permission

$$\begin{array}{r} 0.32 R0 \\ 15 \overline{) 480} \\ \underline{45} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

$$\begin{array}{r} 15 \\ 15 \\ 15 \\ 15 \\ 15 \\ 15 \\ \hline 90 \end{array}$$

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

® **MATH.5.4B** Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity.

2015 – Sample Q12

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

A $b = (24 \div 16) - 8$

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

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

D $b = (24 \times 16) \div 8$

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

Variable Equation

Question from ODEA, where test is with permission

2014 – 7

Abe is buying taco shells for a party. There will be 13 adults and 17 children attending the party. He plans to make 3 tacos for each adult and 1 taco for each child. There are 8 taco shells in each package. What is the least number of packages of taco shells Abe will need to buy in order to have enough tacos for the people attending the party?

A 7, because $(13 \times 3 + 17) \div 8 = 7$

B 28, because $(13 \times 17 \div 3) \div 8 = 28$

C 80, because $(13 + 17) \times 8 \div 3 = 80$

D 8, because $(13 + 17 \times 3) \div 8 = 8$

$$[(13 \times 3) + (17 \times 1)] \div 8$$

$$= [39 + 17] \div 8$$

$$= 56 \div 8 = 7$$

Question from ODEA, where test is with permission

2014 – 40

Nola had 124 sheets of colored paper.

- She used 20 sheets to make a picture.
- She used all the remaining sheets to make 4 posters.
- She used the same number of sheets to make each poster.

Which equation can be used to find n , the number of sheets of colored paper Nola used to make each poster?

F $(124 + 20) \times 4 = n$

G $(124 - 20) \div 4 = n$

H $(124 - 20) \times 4 = n$

J $(124 + 20) \div 4 = n$

$n = \text{number of sheets.}$
 $(124 - 20) \div 4$

Question from ODEA, where test is with permission

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

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

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

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

J $p = (185 - 25) \div 40$

$$p = (185 - 25) \div 40$$

$$= 160 \div 40$$

$$= 4$$

Question from ODEA, where test is with permission

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

© MATH.5.4E Describe the meaning of parentheses and brackets in a numeric expression.

Jacob wrote the expression shown.

$$10 \div 5 + 4(72 - 6)$$

What do these parentheses indicate in the expression?

- F Divide 10 by 5 before adding 4
- G Multiply 4 by 72 before subtracting 6
- H Add 5 and 4 together before subtracting 6 from 72
- ☒ J Subtract 6 from 72 before multiplying by 4

Question from OTIS release test with permission

2 An expression is given.

$$3 \times (8 + 2) \div 2$$

Which statement is true about the parentheses in this expression?

- ☒ A The parentheses indicate that $8 + 2$ should be solved first.
- B The parentheses indicate that $8 + 2$ should be solved last.
- C The parentheses indicate that $2 \div 2$ should be solved last.
- D The parentheses indicate that 3×8 should be solved first.

Question from OTIS release test with permission

2021-2022 FALL DISTRICT SNAPSHOT 1 OUTLINE

® **MATH.5.4F** Simplify numerical expressions that do not involve exponents, including up to two levels of grouping.

16 Margaret opened a new case of lightbulbs.

- The case contained 3 boxes of lightbulbs with 8 lightbulbs in each box.
- Margaret threw 2 of these lightbulbs in the trash because they were damaged.
- Then she took 7 of the lightbulbs out of the case.

Which expression can be used to show that there are 15 lightbulbs still in the case?

F $3 \times 8 - 2 + 7$

G $3(8) - 2(7)$

H $3 \times 8 - (2 + 7)$

J $3 + 8 - 2 + 7$

$$(3 \times 8) = 24$$

$$24 - 2 - 7 = 15$$

so: $(3 \times 8) - 2 - 7 =$

12 What is the value of the expression shown?

F 8.4

G 15.6

H 12

J 19.2

$$4[4.5 - 2(1.2)]$$

$$= 4 \times [4.5 - 2 \times (1.2)]$$

$$= 4 \times [4.5 - 2.4]$$

$$= 4 \times [2.1]$$

$$= 8.4$$

49 What is the value of this expression?

A 1,134

B 972

C 198

D 1,206

$$[45 - (6 + 3)] \times 27$$

$$= [45 - 9] \times 27$$

$$= 36 \times 27$$

$$= 972$$

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

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

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

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