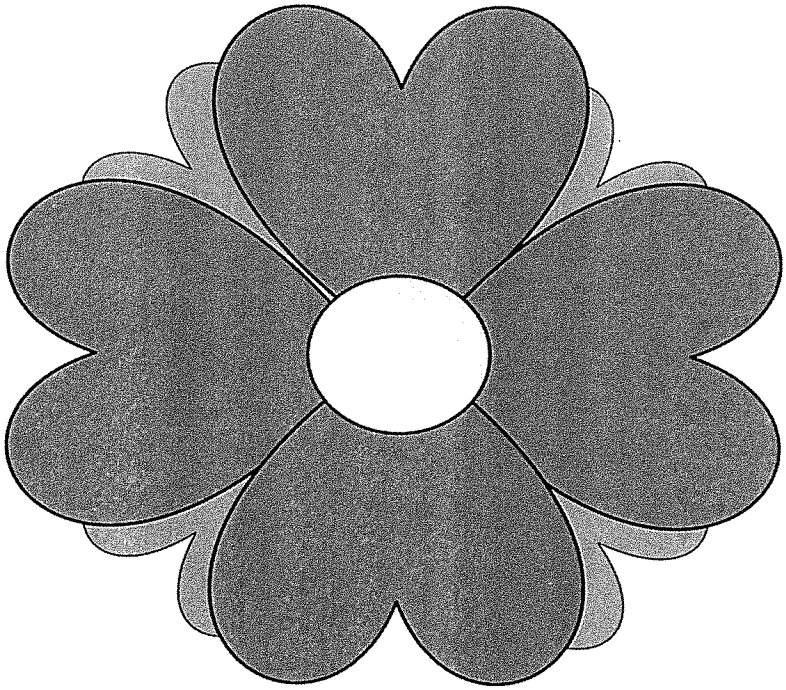
5th Grade Math

Week of May 10 - May 14, 2021



Name _____

* Please do not complete until advised by teacher*

Monday, 5/10/21

Exit Ticket Lesson 13-2

Write a numerical expression for each, then solve the expression.

1. Divide 55 by the sum of 6 and 5.

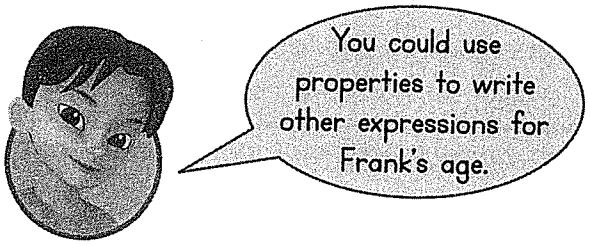
2. Subtract 23 from the sum of 12 and 34

Name _____ Practice Video Tools Games

Additional Practice 13-2
Write Numerical Expressions

Another Look!

Cole is $11\frac{1}{2}$ years old. Uncle Frank is 4 times as old as Cole. Write an expression to show how you could calculate Uncle Frank's age in 6 years.



Uncle Frank's current age:

$4 \times 11\frac{1}{2}$

Uncle Frank's age in 6 years:

$\left(4 \times 11\frac{1}{2}\right) + 6$

The expression $\left(4 \times 11\frac{1}{2}\right) + 6$ shows the calculations that will determine Uncle Frank's age in 6 years.

In **1–7**, write a numerical expression for each calculation.

1. Multiply 16, 3, and 29, and then subtract 17.

2. Add 13.2 and 0.9, and then divide by 0.6.

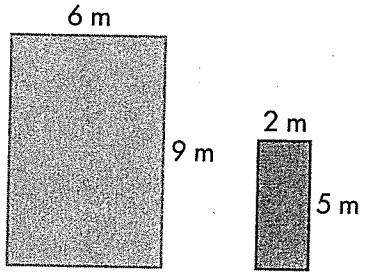
3. Subtract $12\frac{1}{2}$ from the product of $\frac{9}{10}$ and 180.

4. Add the quotient of 120 and 60 to the quotient of 72 and 9.

5. Multiply 71 by 8, and then add 379.

6. Find 3 times the difference of 7.25 and 4.5.

7. Write an expression to show the calculations you could use to determine how much greater the area of the larger rectangle is than the area of the smaller rectangle.



8. Model with Math Lola uses 44 beads to make a bracelet and 96 beads to make a necklace. Write an expression to show how you could calculate the total number of beads Lola used to make 13 bracelets and 8 necklaces.

9. Bart works 36 hours a week and makes $612. Charles works 34 hours a week and makes $663. Who makes more per hour? How do you know?

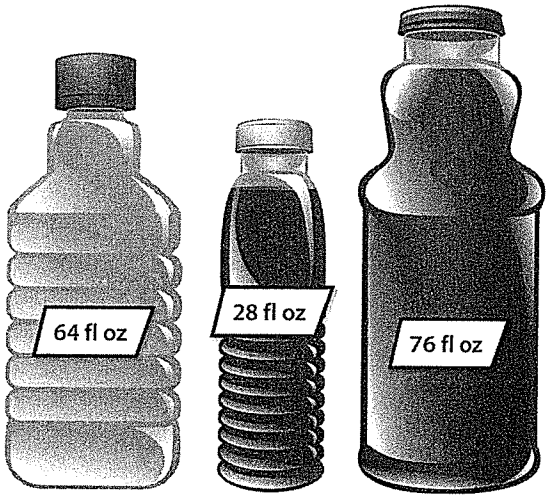
10. Use a property to write an equivalent expression for $12 \times (100 - 5)$. Which property did you use?

11. Doreen solved the following problem:

$\frac{1}{6} \div 5 = \frac{1}{30}$

Show how to use multiplication to check Doreen's answer.

12. Higher Order Thinking Stephen is combining all of the juice shown to make fruit punch. Does the expression $(64 + 28 + 76) \div 6$ show how you could calculate the number of $\frac{3}{4}$-cup servings? Explain.



Assessment Practice

13. Which expression represents the following calculation?

Divide 688 by 32, and then add 16.

Ⓐ $(688 \div 32) + 16$

Ⓑ $688 + (32 \div 16)$

Ⓒ $(688 + 32) \div 16$

Ⓓ $688 \div (32 + 16)$

14. Which is the first step in evaluating the expression?

$(25 - 9) \div 8 \times 3$

Ⓐ Multiply 8 and 3

Ⓑ Subtract 25 and 9

Ⓒ Divide 9 by 8

Ⓓ Multiply 9 and 3

Tuesday, 5/11//21

Exit Ticket, Lesson 13-2 Day 2

Write a numerical expression for each, then solve the expression.

1. Add the quotient of 30 and 10 to the product of 6 and 8.

2. Add 15 to the product of ½ and 12.

Name _____

Practice Video Tools Games

Additional Practice 13-3
Interpret Numerical Expressions

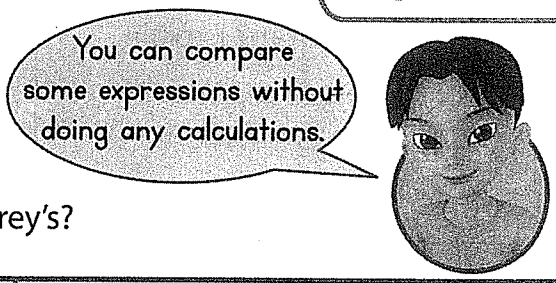
Another Look!

Audrey and Donald played a video game. The expressions below show the number of points each player scored.

Audrey: $32{,}700 + 6{,}140 + 5{,}050$

Donald: $(32{,}700 + 6{,}140 + 5{,}050) - 8{,}815$

How does Donald's score compare to Audrey's?



Both expressions contain the same sum. Audrey: $32{,}700 + 6{,}140 + 5{,}050$ Donald: $(32{,}700 + 6{,}140 + 5{,}050) - 8{,}815$	The expression for Donald's score shows 8,815 subtracted from the sum. So, Donald's score is 8,815 points less than Audrey's score.

In **1** and **2**, without doing any calculations, describe how Expression A compares to Expression B.

1. **A** $(23{,}000 - 789) \times 19$
B $23{,}000 - 789$

2. **A** $6\frac{4}{5} + \left(88 \times \frac{3}{10}\right)$
B $88 \times \frac{3}{10}$

In **3–6**, without doing any calculations, write >, <, or =.

3. $(714 \div 32) - 20 \bigcirc (714 \div 32) - 310$

4. $0.1 \times (716 + 789) \bigcirc 716 + 789$

5. $\frac{1}{2} \times (228 + 4{,}316) \bigcirc (228 + 4{,}316) \div 2$

6. $(3.9 \times 8) + (3.9 \times 4) \bigcirc 3.9 \times 15$

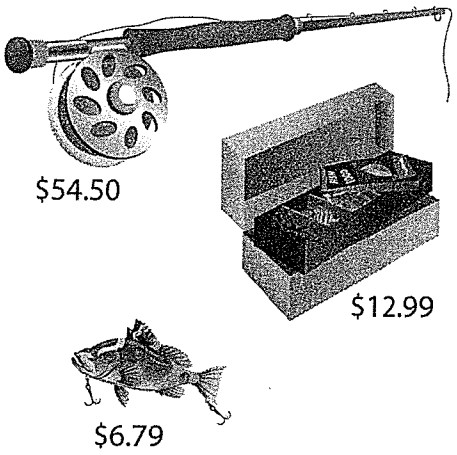
7. Which expression is 16 times as large as $18{,}233 - 4{,}006$?

Ⓐ $(18{,}233 - 4{,}006) + 16$
Ⓑ $(18{,}233 - 4{,}006) \times 16$
Ⓒ $(18{,}233 - 4{,}006) \div 16$
Ⓓ $(18{,}233 \times 16) - 4{,}006$

8. Use Structure Sid paid $6.80 for wrapping paper and $7.35 for ribbon. He wrapped identical gifts for all of his cousins. Sid wrote the expression $(6.80 + 7.35) \div 8$ to help him calculate how much it cost him to wrap each gift. How many gifts did Sid wrap? Explain.

9. Construct Arguments Yolanda bought $3 \times \left(\frac{1}{4} + \frac{7}{8} + 1\frac{1}{2}\right)$ pounds of cheese. Sam bought $2 \times \left(\frac{1}{4} + \frac{7}{8} + 1\frac{1}{2}\right)$ pounds of cheese. Without doing any calculations, determine who bought more cheese. Explain.

10. Jack bought the fishing gear pictured. The sales tax was calculated by multiplying the total cost of the fishing gear by 0.07 and rounding to the nearest cent. How much did Jack pay for the fishing gear including sales tax?



11. Cy bought a laptop computer, a printer, and a router. Cy used a $35 coupon to make the purchase. He wrote $(1{,}415.00 + 277.50 + 44.95) - 35$ to show how he can calculate the final cost, not including sales tax. Write an expression that can be used to find the total price of the items he bought before sales tax and the coupon.

12. Higher Order Thinking Arrange expressions A, B, C, D, and E in order from least to greatest.

A $(9{,}311 + 522) \times 4.8$

B $9{,}311 + 522$

C $(9{,}311 + 522) \times \frac{1}{2}$

D $25 \times (9{,}311 + 522)$

E $(9{,}311 \times 5) + (522 \times 5)$

Assessment Practice

13. Which statement describes the expression $4 \times (17 - 9 + 28)$?

Ⓐ Four times the sum of 9 and 28 subtracted from 17

Ⓑ Four times 17 minus 9 plus 28

Ⓒ Twenty-eight added to the difference of 17 and 9, then multiplied by 4

Ⓓ Nine plus 28 subtracted from the product of 4 and 17

Wednesday, 5/12//21

Exit Ticket, Lesson 13-3

Compare the quantities using <, >, or =. Show work or explain reasoning.

1. $72 \times (37-9)$ _____ $69 \times (37-9)$

2. $(144 \div 12) - 6$ _____ $6 + (144 \div 12)$

Name _____ Date _____

Topic 13 Assessment

1. What is the value of $[3 \times (8 - 2)] + 5$?

2. Which expression represents the following calculation?

   Add 450 to 348, and then multiply by 7.

   a. $450 + 348 \times 7$

   b. $(450 + 348) \times 7$

   c. $450 \times 7 + 348$

   d. $450 \times (7 + 348)$

3. Write an expression that represents the following calculation:

   Divide the difference of 70 and 20 by 25.

4. What is the value of the expression $5 \times (3 + 6) - 8$?

   a. 5

   b. 13

   c. 37

   d. 112

5. Which expression represents the following calculation?

   Subtract 32 from the product of 48 and 15.

   a. $32 - (48 \times 15)$

   b. $(48 - 15) \times 32$

   c. $(48 \times 15) - 32$

   d. $32 \times (48 - 15)$

6. What is the value of $(5 \times 20) + (8 \times 10)$?

7. Which correctly compares $3 \times (54 + 21)$ and $6 \times (54 + 21)$?

   a. $3 \times (54 + 21) = 6 \times (54 + 21)$

   b. $3 \times (54 + 21) > 6 \times (54 + 21)$

   c. $3 \times (54 + 21) < 6 \times (54 + 21)$

   d. $6 \times (54 + 21) < 3 \times (54 + 21)$

8. What is the value of the expression $(5 + 7) \times 3$?

9. Which expression can be used to find the product of 3 and 25 plus the product of 5 and 30?

a. $(50 + 30) \times (5 + 3)$

b. $(3 + 25) \times (5 + 30)$

c. $(5 \times 25) + (3 \times 30)$

d. $(3 \times 25) + (5 \times 30)$

10. Evaluate the expression $3 + (18 - 6) + 20 \div 4$.

Part A

What step do you perform first when evaluating the expression?

a. $3 + 18$

b. $18 - 6$

c. $6 + 8$

d. $8 \div 7$

Part B

What step do you perform second when evaluating the expression?

a. $3 + 12$

b. $12 + 20$

c. $18 - 16$

d. $20 \div 4$

Part C

What is the value of the expression?

Standards Review

Find Out More

You can use what you know about adding whole numbers to add decimals. To add 13.25 and 12.2, you combine like place values.

One way to add decimals is to stack the numbers vertically. Lining up the decimal points is a way to keep track of place values. Using a place-value chart can help.

	Tens	Ones	.	Tenths	Hundredths
	1	3	.	2	5
+	1	2	.	2	0
	2	5	.	4	5

$\frac{2}{10}$ is equivalent to $\frac{20}{100}$, so you can write a 0 in the hundredths column.

The total time is 25.45 seconds.

To find the difference between Sabrina's and Christie's times, subtract 12.20 from 13.25. You can use what you know about subtracting whole numbers to subtract decimals.

	Tens	Ones	.	Tenths	Hundredths
	1	3	.	2	5
−	1	2	.	2	0
	0	1	.	0	5

Christie was faster by 1.05 seconds.

Reflect

1. If Sabrina's time were 13.26 seconds instead of 13.25 seconds, would that change your estimate for the total time? Explain. _____

_____

_____

_____

_____

Practice Adding and Subtracting Decimals

Study the example below. Then solve problems 16–18.

Example

Diana has 3 different beads on her necklace. The red bead is 0.68 centimeter long, the multi-colored bead is 1.22 centimeters long, and the blue bead is 0.8 centimeter long. What is the total length of the beads on Diana's necklace?

The student needed two steps to solve the problem.

Look at how you could show your work using equations.

$$\begin{array}{r} {\scriptstyle 1} \\ 1.22 \\ +\ 0.68 \\ \hline 1.90 \end{array} \qquad \begin{array}{r} {\scriptstyle 1} \\ 1.90 \\ +\ 0.80 \\ \hline 2.70 \end{array}$$

$$0.68 + 1.22 + 0.8 = 2.7$$

Solution 2.7 centimeters

Pair/Share

Does it matter in what order you add the decimals?

16 On average, outdoor cats live 3.18 years and indoor cats live 16.7 years. How much longer does an average indoor cat live than an average outdoor cat?

Show your work.

How many hundredths are equivalent to 7 tenths?

Pair/Share

How do you know what operation to use to solve this problem?

Solution _____

17 Kenton is shopping for clothes at a twelfth anniversary sale. He buys a pair of jeans priced at $24.99 and a clearance-priced shirt for $5.25. The store reduces the amount of his entire purchase by $12.12. How much does Kenton pay for his clothes?

Show your work.

This problem takes more than one step to solve.

Pair/Share

Explain how to check if your answer is reasonable.

Solution _____

18 Three boxes of cereal have masses of 379.4 grams, 424.25 grams, and 379.37 grams. What is the difference between the box of cereal with the greatest mass and the box of cereal with the least mass?

A 44.15 grams

B 44.85 grams

C 44.88 grams

D 45.12 grams

Cambria chose **D** as the correct answer. How did she get that answer?

What operation will solve this problem?

_____

_____

_____

_____

_____

Pair/Share

How could Cambria have checked her answer?

Practice Adding and Subtracting Decimals

Solve the problems.

1 Randy rode his bike 1.23 miles to school from his house. After school, he rode 0.9 mile farther to the library. Randy biked home along the same route, stopping at a park 1.05 miles from the library. How many miles is the park from Randy's house?

A 3.18

B 2.37

C 1.08

D 0.27

2 Tim tracked the change in outside temperature one afternoon. He recorded a temperature of 85.4°F at noon. The temperature then rose 3.85°F over the next 4 hours. At 5:00 PM, Tim recorded a temperature of 89.25°F. How did the temperature change between 4:00 PM and 5:00 PM?

A The temperature increased 0.8°F.

B The temperature decreased 0.2°F.

C The temperature increased 1°F.

D There was no change in temperature.

3 Which equation is true?

A $73.27 + 251.6 = 98.43$

B $37.04 + 56.20 = 93.6$

C $70.64 - (9.3 + 29.36) = 90.7$

D $38.2 - (11.11 + 23.76) = 3.33$

4 The sum of three decimal numbers is 6. Exactly one of the numbers is less than 1. What could the numbers be?

Show your work.

Answer _____