

Homework

Simplify each expression.

1. $11m - 9m = \underline{\hspace{2cm}}$

2. $y + 8y = \underline{\hspace{2cm}}$

3. $13s - s = \underline{\hspace{2cm}}$

4. $d + 2d + d = \underline{\hspace{2cm}}$

5. $(9b - b) - 2b = \underline{\hspace{2cm}}$

6. $104z + z = \underline{\hspace{2cm}}$

7. $21 - (10 - 5) = \underline{\hspace{2cm}}$

8. $(900 - 100) - 100 = \underline{\hspace{2cm}}$

9. $90 - (50 - 1) = \underline{\hspace{2cm}}$

10. $18 \div (27 \div 9) = \underline{\hspace{2cm}}$

11. $(63 \div 7) \div 9 = \underline{\hspace{2cm}}$

12. $40 \div (36 \div 9) = \underline{\hspace{2cm}}$

13. $(48 \div 6) \cdot (11 - 9) = \underline{\hspace{2cm}}$

14. $(3 + 17) \div (16 - 12) = \underline{\hspace{2cm}}$

15. $(15 + 10) - (50 \div 10) = \underline{\hspace{2cm}}$

16. $(19 + 11) \div (9 - 6) = \underline{\hspace{2cm}}$

Evaluate.

17. $c = 3$

$4 \cdot (7 - c)$

18. $r = 2$

$(42 \div 7) \cdot (r + 1)$

19. $w = 7$

$(72 \div 9) \cdot w$

20. $m = 0$

$(12 \div 3) \cdot (5 - m)$

21. $h = 14$

$45 \div (h - 5)$

22. $p = 19$

$(p + 1) \div (9 - 4)$

23. $v = 6$

$(18 - 9) + (2 + v)$

24. $t = 1$

$(7 \cdot 2) \div t$

25. $g = 10$

$(g + 90) \div (17 - 13)$

Solve for \square or n .

26. $7 \cdot (3 + 2) = 7 \cdot \square$

$\square = \underline{\hspace{2cm}}$

27. $(9 - 1) \cdot 4 = \square \cdot 4$

$\square = \underline{\hspace{2cm}}$

28. $8 \cdot (4 + 5) = \square \cdot 9$

$\square = \underline{\hspace{2cm}}$

29. $6 \cdot (8 - 8) = n$

$n = \underline{\hspace{2cm}}$

30. $(12 - 6) \div 3 = n$

$n = \underline{\hspace{2cm}}$

31. $(21 \div 7) \cdot (5 + 5) = n$

$n = \underline{\hspace{2cm}}$

Remembering

Read and write each number in expanded form.

1. ninety-six thousand, one hundred thirty-seven

2. four hundred thirteen thousand, five hundred twenty-one

3. seven hundred eight thousand, fifty-three

4. six hundred thirty thousand, four hundred seventeen

Find the area (in square units) of a rectangle with the given dimensions.

5. 4×6 _____

6. 4×60 _____

7. 5×9 _____

8. 50×9 _____

Divide with remainders.

9. $9 \overline{)28}$

10. $3 \overline{)17}$

11. $6 \overline{)46}$

12. $7 \overline{)54}$

13. **Stretch Your Thinking** Evaluate the expression $(d - 10) + (d \div 3)$ for $d = 21$. Explain each step.

Homework

Write = or \neq to make each statement true.

1. $5 + 2 + 6$ $6 + 7$

2. 90 $110 - 9$

3. 70 $30 + 30$

4. 70 $95 - 25$

5. $2 + 8 + 10$ 30

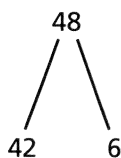
6. $27 - 10$ $14 + 3$

7. $51 + 99$ 150

8. 35 $100 - 55$

9. 50 $20 + 5 + 20$

10. Write the eight related addition and subtraction equations for the break-apart drawing.



Write an equation to solve the problem. Draw a model if you need to.

Show your work.

11. There were some people at the arts and crafts fair. Then 347 people went home. Now 498 people are left at the fair. How many people were at the fair to start?

12. A group of scientists spends 3,980 hours observing the behavior of monarch butterflies. They spend some more hours recording their observations. Altogether, the scientists spend 5,726 hours observing the butterflies and recording their observations. How many hours do the scientists spend recording their observations?

Remembering

Solve.

1. What is 538,152 rounded to the nearest:

a. hundred? _____

b. thousand? _____

c. ten thousand? _____

d. hundred thousand? _____

Draw a rectangle model. Find the tens product, the ones product, and the total product.

2. 3×65

3. 8×29

Evaluate each expression.

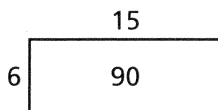
4. $(12 - 4) \cdot (6 + 3) =$ _____

5. $(8 \div 2) + (12 - 2) =$ _____

6. Stretch Your Thinking There were 381 books sold at a children's used book fair. At the end of the day, there were still 493 books remaining. Samantha says there were 112 books at the start of the book fair. Explain her error. How many books were there at the start of the book fair?

Homework

1. Write the eight related multiplication and division equations for the rectangle model below.



_____	_____
_____	_____
_____	_____
_____	_____

Solve each equation.

2. $r = 200 \div 5$

$r =$ _____

3. $12 \times d = 84$

$d =$ _____

4. $80 \div 10 = n$

$n =$ _____

5. $120 = 10 \times m$

$m =$ _____

6. $88 = 8 \times c$

$c =$ _____

7. $100 \div q = 20$

$q =$ _____

Write an equation to solve the problem. Draw a model if you need to.

8. Lucy bought some shrubs to plant in her garden. Each shrub cost \$9. If Lucy spent \$216 in all, how many shrubs did she buy?

Show your work.

9. Jeremiah has 592 flyers in stacks of 8 flyers each. How many stacks of flyers did Jeremiah make?

10. The apples from an average-sized tree will fill 20 baskets. If an orchard has 17 average-sized trees, how many baskets of apples can it produce?

Remembering

Use the Algebraic Notation Method to solve the problem.
Complete the steps.

1. $5 \cdot 68$ _____

$68 =$ _____ $+$ _____

$$\begin{aligned} 5 \cdot 68 &= \underline{\quad} \cdot (\underline{\quad} + \underline{\quad}) \\ &= 300 + 40 \\ &= 340 \end{aligned}$$

Solve. Use the Place Value Sections and the Expanded Notation Methods for division.

2. _____0 + _____ =

3	234	

$$3 \overline{)234}$$

3. _____0 + _____ =

9	468	

$$9 \overline{)468}$$

Write = or \neq to make each statement true.

4. $40 + 40$ ○ 90

5. $12 - 4$ ○ $12 + 4$

6. $4 + 7$ ○ $4 + 2 + 5$

7. 26 ○ $30 - 4$

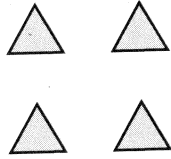
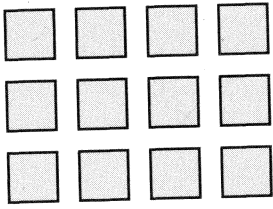
8. $8 + 10 + 2$ ○ 20

9. $85 - 25$ ○ 65

10. **Stretch Your Thinking** Write a word problem about puzzle pieces using the equation $9 \times p = 450$. Then solve the equation.

Homework

Use the shapes to answer Exercises 1–4.



1. How many squares? How many triangles?
Use multiplication to find the answers.

2. Because $4 \times \underline{\hspace{2cm}} = 12$, there are $\underline{\hspace{2cm}}$ times
as many squares as triangles.

3. Write a multiplication equation that compares
the number of squares s to the number of
triangles t .

4. Write a division equation that compares the
number of triangles t to the number of
squares s .

Solve each comparison problem.

5. Stephen and Rocco were playing a video game.
Stephen scored 2,500 points which is 5 times as
many points as Rocco scored. How many points
did Rocco score?

6. Nick's dog weighs 72 pounds. Elizabeth's cat weighs
9 pounds. How many times as many pounds does
Nick's dog weigh as Elizabeth's cat weighs?

Homework

**Write and solve an equation to solve each problem.
Draw comparison bars when needed.**

Show your work.

1. This year, a business had profits of \$8,040. This is 4 times as great as the profits that the business had last year. What were last year's profits?

2. In July, 74,371 people visited an art museum. In August 95,595 people visited the art museum. How many fewer people visited the art museum in July than in August?

3. Drake has 36 animal stickers. Brenda has 9 animal stickers. How many times as many animal stickers does Drake have as Brenda has?

4. A game is being watched by 60 adults and some children. If there are 20 more adults than children, how many children are watching the game?

5. During the first lunch period, 54 students ate hot lunch. This is 9 fewer students than ate hot lunch during the second lunch period. How many students ate hot lunch during the second lunch period?

6. The Jenkins Family traveled 750 miles by car during the summer. The Palmer Family traveled 3 times as many miles by car this summer. How many miles did the Palmer Family travel?

Remembering

Copy each exercise, aligning the places correctly. Then add.

1. $11,931 + 3,428$

2. $25,422 + 89,360$

Draw a rectangle model. Solve using any method that relates to the model.

3. 3×428 _____

4. 7×519 _____

Write and solve an equation to solve the problem.

Draw comparison bars if you need to.

5. Virginia sold 84 rolls of wrapping paper this year. She sold 3 times as many rolls of wrapping paper this year as she sold last year. How many rolls of wrapping paper did Virginia sell last year?

6. **Stretch Your Thinking** There are 1,438 boys and 1,196 girls at a school. How many fewer girls are there than boys?

Write the comparison question for this problem in a different way. Then write and solve an equation to solve the problem. Draw comparison bars if you need to.

Homework

The graph below shows the amount of snow recorded each month last winter. Use the graph for Problems 1–6.

1. During which month was the amount of snow recorded 12 inches greater than the amount of snow recorded in December?
- _____

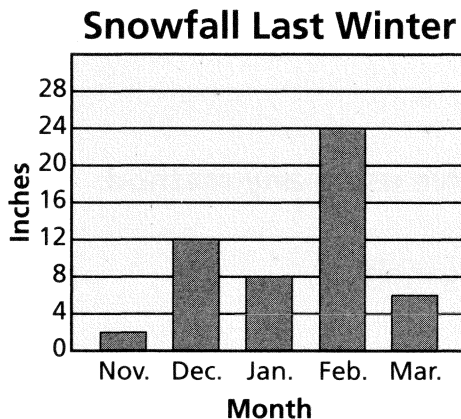
2. How many fewer inches of snow were recorded in March than were recorded in February?
- _____

3. The total amount of snow shown in the graph is 4 times as much snow as was recorded during the winter of 2004. How much snow was recorded during the winter of 2004?
- _____

4. Write an addition equation and a subtraction equation that compare the number of inches of snow recorded during December (d) to the number of inches of snow recorded during March (m).
- _____

5. Write a multiplication equation and a division equation that compare the number of inches of snow recorded during November (n) to the number of inches of snow recorded during January (j).
- _____

6. On a separate sheet of paper, write a sentence about the graph that contains the words *times as much*.



11/20 - 10:30 am

11/21 - 9:30 am

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HOUGHTON MIFFLIN HARCOURT

MATH

Expressions

Common Core

Dr. Karen C. Fuson



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11/20 - 10:30 am

11/21 - 9:30 am

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