

HOUGHTON MIFFLIN HARCOURT

M A T H
Expressions
Common Core

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GRADE
4
Volume 1



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HOUGHTON MIFFLIN HARCOURT

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Homework

Write the number of tens and the number of ones in each number.

1. 56

_____ tens

_____ ones

2. 708

_____ tens

_____ ones

3. 6,170

_____ tens

_____ ones

Write the number of thousands and the number of hundreds in each number.

4. 4,982

_____ thousands

_____ hundreds

5. 316

_____ thousands

_____ hundreds

6. 2,057

_____ thousands

_____ hundreds

Make a place-value drawing for each number, using ones, quick tens, hundred boxes, and thousand bars.

7. 36

8. 510

9. 403

10. 1,072

Remembering

Multiply or divide.

1. $8 \times 3 =$ _____

2. $40 \div 4 =$ _____

3. $27 \div 9 =$ _____

4. $7 \times 6 =$ _____

5. $2 \times 8 =$ _____

6. $6 \times 5 =$ _____

Use the diagram to complete Exercises 7–10.



Write two related multiplication problems for the diagram.

7. _____

8. _____

Write two related division problems for the diagram.

9. _____

10. _____

11. **Stretch Your Thinking** Marcus says this place value drawing represents the number 4,083. Owen says it represents 483. Which student is correct? Explain the error.



Homework

Read and write each number in standard form.

1. $90 + 2$ _____

2. $600 + 80 + 9$ _____

3. $2,000 + 800 + 50 + 7$ _____

4. $3,000 + 80 + 5$ _____

Read and write each number in expanded form.

5. 48 _____

6. 954 _____

7. 6,321 _____

8. 4,306 _____

9. 1,563 _____

10. 2,840 _____

Read and write each number in word form.

11. $300 + 20 + 5$ _____

12. $5,000 + 700 + 40 + 8$ _____

13. $9,000 + 400 + 6$ _____

Read and write each number in standard form.

14. seventy-six _____

15. three hundred one _____

16. four thousand, two hundred sixteen _____

17. five thousand, one hundred forty-two _____

Write the value of the underlined digit.

18. $\underline{2}87$ _____

19. $8,\underline{7}92$ _____

20. $7,\underline{8}12$ _____

Remembering

Multiply or divide.

1. $6 \times 4 =$ _____

2. $56 \div 8 =$ _____

3. $45 \div 9 =$ _____

4. $6 \times 6 =$ _____

5. $3 \times 7 =$ _____

6. $48 \div 6 =$ _____

7. Grace read six books over the summer. Her sister read three times that number. How many books did Grace's sister read over the summer?

Write the number of thousands and the number of hundreds in each number.

8. 5,812

_____ thousands

_____ hundreds

9. 7,026

_____ thousands

_____ hundreds

Make a place value drawing for each number, using ones, quick tens, hundred boxes, and thousand bars.

10. 603

11. 3,187

12. **Stretch Your Thinking** Mr. Thomas writes 4,964 on the board. Amy says the value of the underlined digit is 9. Chris said the value is 900. Which student is correct? Explain.

Homework

Round each number to the nearest ten.

1. 46 _____

2. 381 _____

3. 4,175 _____

4. 5,024 _____

Round each number to the nearest hundred.

5. 789 _____

6. 971 _____

7. 2,759 _____

8. 3,148 _____

Round each number to the nearest thousand.

9. 6,578 _____

10. 4,489 _____

11. 8,099 _____

12. 2,761 _____

Compare using $>$, $<$, or $=$.

13. 4,538 ○ 4,835

14. 3,554 ○ 3,449

15. 1,289 ○ 1,298

16. 7,235 ○ 6,987

17. 4,004 ○ 4,034

18. 5,609 ○ 5,059

Solve.

19. When you round a number, which digit in the number helps you decide to round up or round down? Explain your answer.

20. When you round a number, what should you do with the digits to the right of the place to which you are rounding?

Remembering

Find the unknown number.

1. $4 \times 8 = \underline{\hspace{2cm}}$

2. $42 \div 7 = \underline{\hspace{2cm}}$

3. $63 \div \underline{\hspace{2cm}} = 9$

4. $\underline{\hspace{2cm}} \times 5 = 40$

5. $9 \times \underline{\hspace{2cm}} = 81$

6. $\underline{\hspace{2cm}} \div 6 = 10$

7. $21 \div 7 = \underline{\hspace{2cm}}$

8. $10 \times \underline{\hspace{2cm}} = 100$

Write the number of tens and the number of ones in each number.

9. 607

 $\underline{\hspace{2cm}}$ tens $\underline{\hspace{2cm}}$ ones

10. 9,324

 $\underline{\hspace{2cm}}$ tens $\underline{\hspace{2cm}}$ ones

Read and write each number in standard form.

11. $40 + 3 \underline{\hspace{2cm}}$

12. $500 + 70 + 9 \underline{\hspace{2cm}}$

13. $1,000 + 200 + 50 + 8 \underline{\hspace{2cm}}$

14. $8,000 + 70 + 7 \underline{\hspace{2cm}}$

15. **Stretch Your Thinking** Sara is thinking of a number.

When she rounds her number to the nearest hundred, she gets 700. What is the greatest number Sara can be thinking of? Explain.

Homework

Read and write each number in expanded form.

1. 39,012 _____

2. 640,739 _____

3. 102,453 _____

4. 460,053 _____

Read and write each number in word form.

5. 1,000,000

6. 730,812

7. 45,039

8. 600,439

Read and write each number in expanded form.

9. nine hundred twenty-three thousand, nine hundred twenty-three

10. one hundred forty thousand, one hundred four

11. seventy-six thousand, five

12. fifty-nine thousand, two hundred sixty-one

13. seven hundred thousand, four hundred thirty

14. thirty-one thousand, two hundred seventy-nine

Remembering

Use the numbers 7, 9, and 63 to complete the related equations.

1. $7 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

2. $9 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3. $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = 7$

4. $\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = 9$

Solve.

5. Aileen made 36 mini muffins for the school bake sale. Each bag holds four mini muffins. How many bags of mini muffins will she have for the bake sale?

Read and write each number in expanded form.

6. 86 _____

7. 421 _____

8. 7,915 _____

9. 3,402 _____

Write the value of the underlined digit.

10. 489 _____

11. 7,493 _____

12. 1,506 _____

Round each number to the nearest ten.

13. 47 _____

14. 6,022 _____

Round each number to the nearest hundred.

15. 672 _____

16. 3,940 _____

17. **Stretch Your Thinking** How many zeros are in the standard form of six hundred thousand, twenty? Explain.

Homework

Compare using $>$, $<$, or $=$.

1. 57,068 57,860

2. 24,516 24,165

3. 154,424 145,424

4. 836,245 683,642

5. 89,175 89,175

6. 100,000 1,000,000

Round to the nearest ten thousand.

7. 11,295 _____

8. 82,964 _____

9. 97,079 _____

Round to the nearest hundred thousand.

10. 153,394 _____

11. 410,188 _____

12. 960,013 _____

13. 837,682 _____

Solve.

14. What would 672,831 be rounded to the nearest:

a. ten? _____

b. hundred? _____

c. thousand? _____

d. ten thousand? _____

e. hundred thousand? _____

15. Compare the number 547,237 rounded to the nearest hundred thousand and 547,237 rounded to the nearest ten thousand. Which is the greater number? Write a comparison statement and explain your answer.

Remembering

Find the unknown value in the number sentence.

1. $8 \times k = 16$

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

2. $n \times 9 = 90$

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

3. $35 \div t = 5$

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

4. $p \div 6 = 9$

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

Solve.

5. In an arcade game, Nick can earn up to 10 tickets, depending on which slot his coin goes through. If he plays the game six times, what is the greatest number of tickets Nick could earn?

Round each number to the nearest thousand.

6. 2,950 _____

7. 4,307 _____

Read and write each number in word form.

8. 16,977 _____

9. 403,056 _____

10. **Stretch Your Thinking** Leon says that he can compare numbers in the same way that he alphabetizes words. For example, since the first two letters of *cat* and *cane* are the same, he goes to the next letter to compare. Since *n* comes before *t* in the alphabet, the word *cane* comes first in a dictionary. To compare 64,198 with 641,532, he knows that the first three digits 641 are the same. Then he compares the next digit in each number. Since 9 is greater than 5, the number 64,198 must be greater. Is Leon's way of thinking correct? Explain.

Homework

Use the information in the table to answer the questions.

Driving Distances (in miles) between Various Cities in the United States

	New York, NY	Chicago, IL	Los Angeles, CA
Atlanta, GA	886	717	2,366
Dallas, TX	1,576	937	1,450
Nashville, TN	914	578	2,028
Omaha, NE	1,257	483	1,561
Seattle, WA	2,912	2,108	1,141
Wichita, KS	1,419	740	1,393

1. If you drive from New York to Dallas and then from Dallas to Chicago, how many miles would you drive?

2. Which two cities are farther apart in driving distance: Seattle and Los Angeles or Wichita and New York? Use place value words to explain your answer.

Use any method to add. On another sheet of paper, make a drawing for exercise 5 to show your new groups.

$$\begin{array}{r} 3. \quad 1,389 \\ + 5,876 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 3,195 \\ + 2,674 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 1,165 \\ + 7,341 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 2,653 \\ + 4,908 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 3,692 \\ + 7,543 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 8,598 \\ + 5,562 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 4,295 \\ + 8,416 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 6,096 \\ + 9,432 \\ \hline \end{array}$$

Remembering

Multiply or divide.

1. $81 \div 9 = \underline{\hspace{2cm}}$

2. $7 \times 4 = \underline{\hspace{2cm}}$

3. $9 \times 3 = \underline{\hspace{2cm}}$

4. $24 \div 4 = \underline{\hspace{2cm}}$

5.
$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$$

7. $10 \overline{)80}$

8. $7 \overline{)42}$

Read and write each number in expanded form.

9. eighty-six thousand, nine hundred twenty-one

10. nine hundred twenty thousand, four hundred thirteen

Compare using $>$, $<$, or $=$.

11. $36,290 \bigcirc 36,290$

12. $438,000 \bigcirc 43,800$

13. $298,150 \bigcirc 298,105$

14. $999,999 \bigcirc 1,000,000$

15. **Stretch Your Thinking** Find the unknown digits in the following addition problem.

$$\begin{array}{r} 3, \square 6 \square \\ + 4, 9 \square 2 \\ \hline \square, 5 3 6 \end{array}$$

Homework

Copy each exercise, lining up the places correctly. Then add.

1. $51,472 + 7,078$

2. $94,280 + 56,173$

3. $1,824 + 36,739$

4. $372,608 + 51,625$

5. $314,759 + 509,028$

6. $614,702 + 339,808$

7. $493,169 + 270,541$

8. $168,739 + 94,035$

The table shows the surface area of each of the Great Lakes.

Use the data in the table to help answer the following questions.

Lake	Surface Area (square miles)
Erie	9,906
Huron	22,973
Michigan	22,278
Ontario	7,340
Superior	31,700

9. Which is greater, the surface area of Lake Superior, or the sum of the surface areas of Lake Michigan and Lake Erie?

Show your work.

10. Which two lakes have a combined surface area of 30,313 square miles?

Remembering

Multiply or divide.

1. $30 \div 5 =$ _____

2. $8 \times 7 =$ _____

3. $4 \times 6 =$ _____

4. $70 \div 7 =$ _____

5. $3 \times 9 =$ _____

6. $36 \div 6 =$ _____

Compare using $>$, $<$, or $=$.

7. 6,299 62,990

8. 389,151 394,027

9. 134,657 134,257

10. 93,862 93,862

Use any method to add.

11.
$$\begin{array}{r} 1,362 \\ + 6,509 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 3,893 \\ + 5,245 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 6,399 \\ + 7,438 \\ \hline \end{array}$$

14. **Stretch Your Thinking** Peter adds $245,936 + 51,097$ as follows. Explain his error. What is the correct sum?

$$\begin{array}{r} 1 1 \\ 245,936 \\ + 51,097 \\ \hline 756,906 \end{array}$$

Homework

Write a number sentence that shows an estimate of each answer. Then write the exact answer.

1. $69 + 25$ _____

2. $259 + 43$ _____

3. $2,009 + 995$ _____

$$\begin{array}{r} 4. \quad 5 \\ \quad 3 \\ \quad 7 \\ + \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 38 \\ \quad 54 \\ + \quad 52 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 28 \\ \quad 44 \\ \quad 32 \\ + \quad 46 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 243 \\ \quad 625 \\ + \quad 387 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 154 \\ \quad 131 \\ \quad 204 \\ + \quad 179 \\ \hline \end{array}$$

Solve.

Show your work.

9. Paul's stamp collection includes 192 domestic and 811 foreign stamps.

About how many domestic and foreign stamps does Paul have altogether?

Exactly how many domestic and foreign stamps does Paul have altogether?

10. Plane A travels 102,495 miles. Plane B travels 91,378 miles. How many miles in all do the two planes travel?

Explain how you can use estimation to check that your answer is reasonable.

Remembering

What is 362,584 rounded to the nearest:

1. hundred? _____

2. thousand? _____

3. ten thousand? _____

4. hundred thousand? _____

Use any method to add.

$$\begin{array}{r} 5. \quad 2,938 \\ + 4,271 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 8,305 \\ + 1,467 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 8,074 \\ + 3,552 \\ \hline \end{array}$$

Copy each exercise, lining up the places correctly. Then add.

8. $45,296 + 38,302$

9. $293,017 + 58,226$

10. **Stretch Your Thinking** Luanne estimates the sum of $39 + 15$ is about $40 + 15$, or 55. Jacob estimates the sum of $39 + 15$ is about $40 + 20$, or 60. Which estimate is closer to the exact sum? Explain.

Homework

Subtract. Show your new groups.

$$\begin{array}{r} 1. \quad 7,000 \\ - 3,264 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 9,632 \\ - 3,785 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 8,054 \\ - 1,867 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 4,000 \\ - 2,945 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 8,531 \\ - 7,624 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 8,006 \\ - 4,692 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 9,040 \\ - 5,712 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 6,000 \\ - 5,036 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 7,180 \\ - 4,385 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 6,478 \\ - 3,579 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 9,490 \\ - 5,512 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 5,000 \\ - 3,609 \\ \hline \end{array}$$

Solve.

Show your work.

13. A cross-country automobile rally is 1,025 kilometers long. At a stopping place, the leader had traveled 867 kilometers. How far away was the finish line?

14. A census counted 5,407 people in Marina's home town. If 3,589 are males, how many are females?

15. A construction company is building a stone wall. The finished wall will contain 5,000 stones. So far, 1,487 stones have been placed. How many stones have not been placed?

Remembering

Use any method to add.

$$\begin{array}{r} 1. \quad 6,022 \\ + 1,988 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 4,586 \\ + 1,693 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 8,374 \\ + 3,707 \\ \hline \end{array}$$

The table shows the amount of litter collected from parks across a city on Earth Day each year. Use the data in the table to help answer the following questions.

4. How much litter was collected altogether in 2007 and 2008?

5. Which two years had a combined litter collection of 23,456 pounds?

Litter Collected on Earth Day

Year	Pounds of Litter
2007	8,293
2008	12,104
2009	15,877
2010	11,352

Write an equation that shows an estimate of each answer. Then write the exact answer.

6. $495 + 812$ _____
7. $7,203 + 299$ _____
8. $2,859 + 6,017$ _____

9. **Stretch Your Thinking** Bridget ungrouped 5,000 as shown. Use your understanding of place value to explain how the ungrouped number is equal to 5,000.

$$\begin{array}{r} 4,9910 \\ \cancel{5,000} \\ - 2,896 \\ \hline \end{array}$$

Homework

Subtract. Then use addition to check the subtraction.

Show your work.

1. $1,400 - 238 = \underline{\quad}$

2. $1,900 - 1,238 = \underline{\quad}$

Check: _____

Check: _____

3. $4,620 - 1,710 = \underline{\quad}$

4. $5,243 - 2,454 = \underline{\quad}$

Check: _____

Check: _____

5. $3,142 - 1,261 = \underline{\quad}$

6. $2,375 - 896 = \underline{\quad}$

Check: _____

Check: _____

Solve.

Show your work.

7. A school library has 1,058 books in its collection.
The town library has 4,520 books in its collection.
How many books are there altogether?

8. A town official knows how many books the town library has and how many books both libraries have altogether. She wants to know how many books the school library has. How can she use subtraction to find the answer?

Remembering

Copy each exercise, lining up the places correctly. Then add.

1. $32,418 + 508,182$

2. $734,150 + 60,382$

Solve.

Show your work.

3. The entire fourth grade is made up of 102 boys and 86 girls. *About* how many students are in the fourth grade altogether?

Exactly how many students are in the fourth grade altogether?

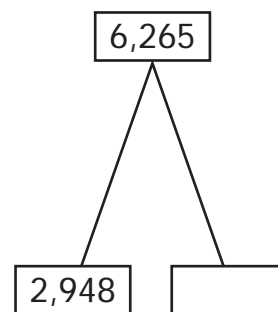
Subtract. Show your new groups.

4.
$$\begin{array}{r} 5,000 \\ - 2,583 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 8,259 \\ - 3,716 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 2,081 \\ - 1,733 \\ \hline \end{array}$$

7. **Stretch Your Thinking** What is the unknown number in this break-apart drawing? List all the addition and subtraction problems for the drawing.



Homework**Subtract.**

$$\begin{array}{r} 1. \quad 71,824 \\ - 36,739 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 960,739 \\ - 894,045 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 665,717 \\ - 82,824 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 372,608 \\ - 57,425 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 597,603 \\ - 404,980 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 614,702 \\ - 539,508 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 724,359 \\ - 99,068 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 394,280 \\ - 56,473 \\ \hline \end{array}$$

In an experiment, a scientist counted how many bacteria grew in several labeled dishes. The table shows how many bacteria were in each dish.

Dish	Number of Bacteria
A	682,169
B	694,154
C	57,026
D	150,895
E	207,121

Solve. Estimate to check.

Show your work.

9. What was the difference between the greatest number of bacteria and the least number of bacteria?

10. How many more bacteria were in dish A than in dish D?

11. How many fewer bacteria were in dish E than in the combined dish C and dish D?

Remembering

Write an equation that shows an estimate of each answer. Then write the exact answer.

1. $503 + 69$ _____

2. $2,825 + 212$ _____

3. $6,190 + 3,858$ _____

Subtract. Show your new groups.

$$\begin{array}{r} 4. \quad 8,760 \\ - 1,353 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 6,000 \\ - 5,258 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 5,060 \\ - 2,175 \\ \hline \end{array}$$

Subtract. Then use addition to check the subtraction. Show your work.

7. $6,355 - 891 =$ _____

8. $8,326 - 1,425 =$ _____

Check: _____

Check: _____

9. **Stretch Your Thinking** Write an addition word problem in which the estimated sum is 14,000.

Homework

Solve each problem.

Show your work.

1. Mr. Chase is ordering 249 pencils, 600 sheets of paper, and 190 erasers. How many more sheets of paper than pencils and erasers altogether is Mr. Chase ordering?
- _____

2. There were 623 people at the concert on Friday. On Saturday, 287 more people attended the concert than attended on Friday. How many people in all attended the concert on Friday and Saturday?
- _____

Add or subtract.

$$\begin{array}{r} 3. \quad 695 \\ + 487 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 8,452 \\ - 5,938 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 5,895 \\ + 9,727 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 49,527 \\ - 26,088 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 86,959 \\ - 38,486 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 39,458 \\ + 98,712 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 286,329 \\ + 394,065 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 708,623 \\ - 421,882 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 952,774 \\ - 613,386 \\ \hline \end{array}$$

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 7,982 \\ - 3,517 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 600,000 \\ - 399,410 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 138,925 \\ + 47,316 \\ \hline \end{array}$$

Subtract. Then use addition to check the subtraction. Show your work.

$$4. \quad 4,652 - 1,593 =$$

$$5. \quad 30,000 - 26,931 =$$

$$6. \quad 896,581 - 355,274 =$$

Check:

Check:

Check:

Subtract.

$$7. \quad 731,285 - 369,114 = \underline{\hspace{2cm}} \quad 8. \quad 645,803 - 52,196 = \underline{\hspace{2cm}}$$

9. **Stretch Your Thinking** Write a two-step problem in which the answer is 130.

Homework

Add or subtract.

1. $12,673 - 9,717 = \underline{\hspace{2cm}}$ 2. $8,406 + 45,286 = \underline{\hspace{2cm}}$ 3. $2,601 - 1,437 = \underline{\hspace{2cm}}$

Answer each question about the information in the table.

Area of the Countries of Central America

Country	Area (square miles)
Belize	8,867
Costa Rica	19,730
El Salvador	8,124
Guatemala	42,042
Honduras	43,278
Nicaragua	49,998
Panama	30,193

4. What is the total area of Guatemala and Honduras?

Show your work.

5. Which two countries have the least area? What is the sum of their areas?

6. Which is greater: the area of Nicaragua or the total area of Costa Rica and Panama?

7. How much greater is the area of Honduras than the area of Guatemala?

Remembering

Subtract. Then use addition to check the subtraction.

1. $1,500 - 705 = \underline{\hspace{2cm}}$

2. $9,523 - 8,756 = \underline{\hspace{2cm}}$

Check: _____

Check: _____

The table shows how many fans attended a team's baseball games at the start of the season. Solve.

Estimate to check.

3. How many fewer people attended Game 4 than Game 5?

Game	Fans
1	68,391
2	42,908
3	9,926
4	35,317
5	46,198

4. What was the difference between the greatest number of fans and the least number at a game?

Add or subtract.

5.
$$\begin{array}{r} 7,452 \\ + 3,801 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 2,155 \\ + 5,890 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 293,635 \\ - 178,098 \\ \hline \end{array}$$

8. **Stretch Your Thinking** The equation $32,904 + m = 61,381$ shows that the number of females plus the number of males, m , living in a certain city equals the total population. Write a subtraction equation that represents the same situation. How many males live in this city?

Homework

Companies often use bar graphs to present information to the media or stockholders. Data may show how attendance or profits vary at different times of the year, or compare the successes of different divisions or quarters of the year.

1. Research attendance numbers for your favorite amusement park, sporting team, or movie during five different periods of time. Complete the table with your information.

2. Use the grid below to graph the data in your table.

Remembering

Subtract.

1. $958,299 - 63,419 = \underline{\hspace{2cm}}$

2. $9,523 - 8,756 = \underline{\hspace{2cm}}$

Add or subtract.

3.
$$\begin{array}{r} 5,191 \\ + 273 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 13,687 \\ + 25,137 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 758,194 \\ - 6,029 \\ \hline \end{array}$$

Answer each question about the information in the table.

6. What is the total number of miles the trucker drove in the last 2 years?

7. Which is greater, the increase in miles driven between 1998 and 1999 or between 1999 and 2000? What is that increase?

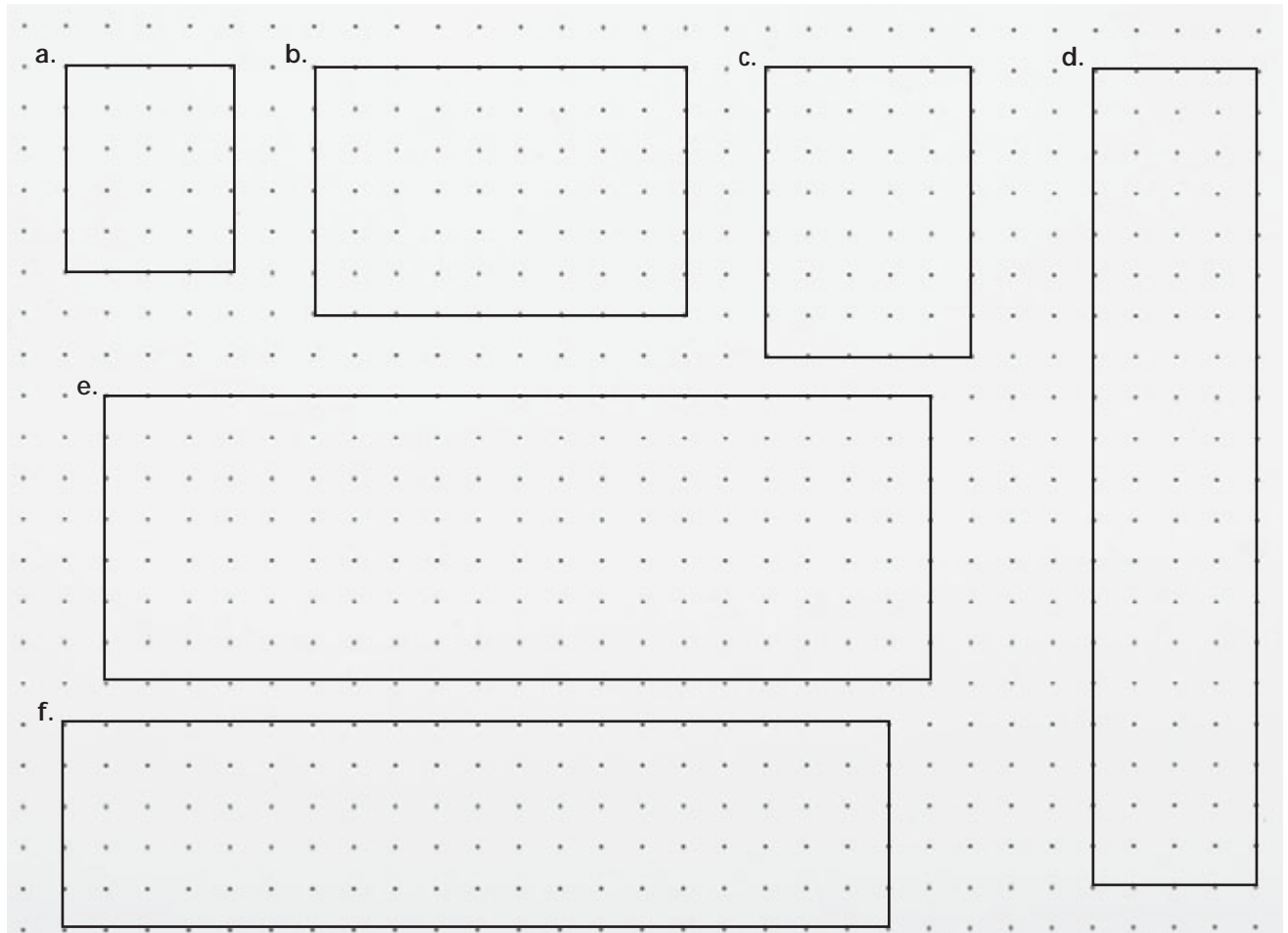
Miles Driven by a Trucker

Year	Miles
1998	75,288
1999	117,391
2000	126,304
2001	87,192
2002	94,386

8. **Stretch Your Thinking** Look at the trucking data in the table for Exercises 6 and 7. How would you round the data to make a bar graph? What scale would you use?

Homework

1. Label the sides of each rectangle.



2. Write the equation representing the area of each rectangle shown above.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

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

3. 3×5 _____

4. 3×50 _____

5. 30×5 _____

Remembering

Read and write each number in expanded form.

1. 71 _____

2. 298 _____

3. 5,627 _____

4. 3,054 _____

Read and write each number in standard form.

5. $500 + 80 + 3$

6. $9,000 + 200 + 40 + 1$

7. eight hundred seventeen

8. one thousand, six hundred forty-six

Read and write each number in word form.

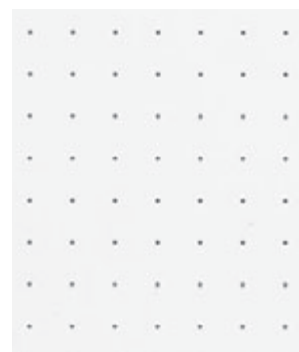
9. $90 + 7$ _____

10. $300 + 10 + 2$ _____

11. $4,000 + 100 + 80 + 5$ _____

12. $8,000 + 700 + 6$ _____

13. **Stretch Your Thinking** Emmy planted onion bulbs in her backyard garden, giving each bulb one square foot of space. She arranged the onion bulbs in a rectangular array of 4 rows with 5 in each row. Make a sketch of Emmy's onion patch. How many onion bulbs did she plant? What is the area of the onion patch? Identify three other rectangular arrangements Emmy could have used to plant these onion bulbs.



Homework

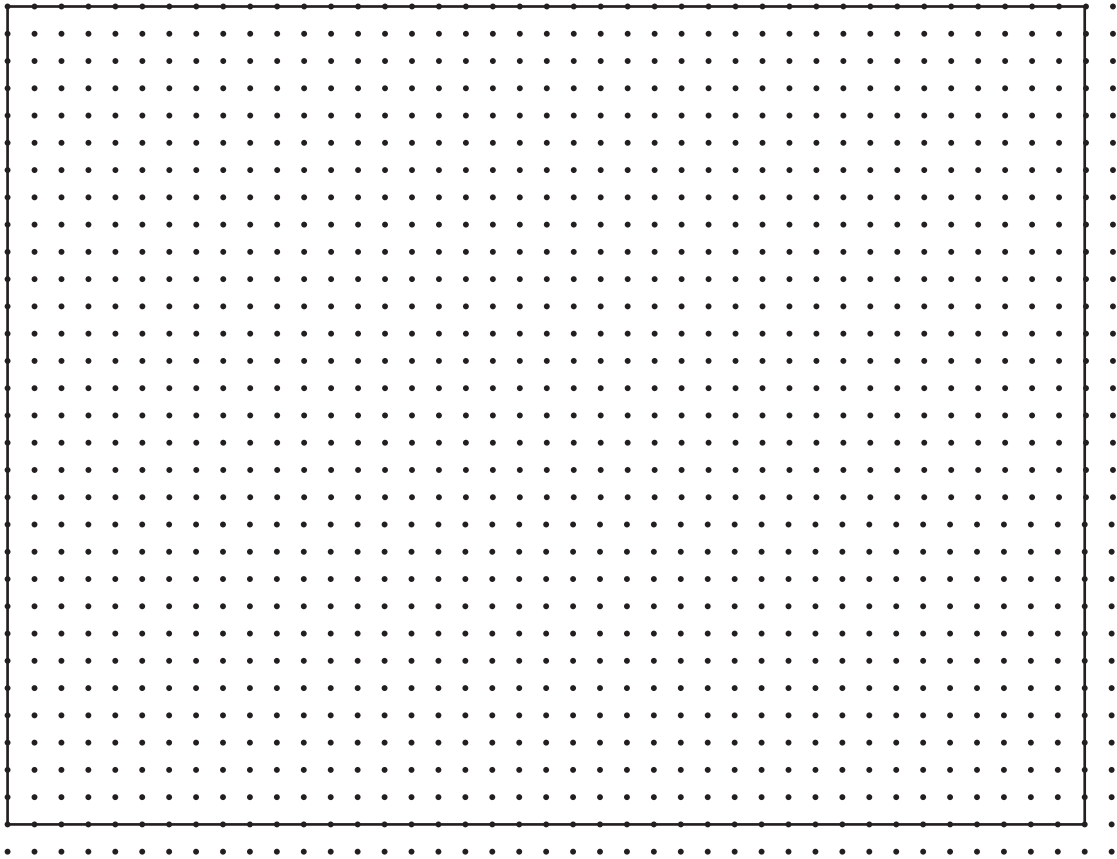
Solve each problem.

1. $10 \times \underline{\hspace{2cm}} = 3 \text{ tens}$

2. $10 \times 6 \text{ tens} = \underline{\hspace{2cm}}$

Follow the directions.

3. Divide the 30×40 rectangle into 10-by-10 squares of 100 to help find the area.



4. Complete the steps to factor the tens.

$$30 \times 40 = (\underline{\hspace{2cm}} \times 10) \times (\underline{\hspace{2cm}} \times 10)$$

$$= (\underline{\hspace{2cm}} \times \underline{\hspace{2cm}}) \times (10 \times 10)$$

$$= \underline{\hspace{2cm}} \times 100$$

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

5. What is the area of the 30×40 rectangle, in square units?

Remembering

Write the number of thousands and the number of hundreds in each number.

1. 4,672

_____ thousands

_____ hundreds

2. 1,023

_____ thousands

_____ hundreds

3. 610

_____ thousands

_____ hundreds

Read and write each number in expanded form.

4. twenty-five thousand, three hundred fifty-one

5. five hundred six thousand, five hundred ninety-eight

6. nine hundred thirteen thousand, eight hundred twenty-seven

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

7. 4×6 _____

8. 4×60 _____

9. 9×2 _____

10. 90×2 _____

11. 3×7 _____

12. 70×3 _____

13. **Stretch Your Thinking** Li is using place value to multiply 90×30 .

$$\begin{aligned} 90 \times 30 &= (9 \times 10) \times (3 \times 10) \\ &= (9 \times 3) \times (10 \times 10) \\ &= 27 \times 10 \\ &= 270 \end{aligned}$$

Is Li's answer correct? Explain.

Homework

Find each product by factoring the tens. Draw rectangles if you need to.

1. 6×2 , 6×20 , and 6×200

2. 4×8 , 4×80 , and 4×800

3. 5×5 , 5×50 , and 5×500

4. 5×9 , 50×9 , and 500×9

5. 6×5 , 60×5 , and 60×50

6. 7×6 , 70×6 , and 70×60

On a sheet of grid paper, draw two different arrays of connected squares for each total. Label the sides and write the multiplication equation for each of your arrays.

7. 18 squares

8. 20 squares

9. 24 squares

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 2,728 \\ + 7,245 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 83,054 \\ + 1,496 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 27,300 \\ - 9,638 \\ \hline \end{array}$$

Use any method to add.

$$\begin{array}{r} 4. \quad 4,335 \\ + 2,694 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 3,806 \\ + 8,129 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 6,401 \\ + 7,763 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 9,826 \\ + 8,531 \\ \hline \end{array}$$

Solve each problem.

8. $10 \times \underline{\hspace{2cm}} = 6 \text{ tens}$

9. $10 \times 9 = \underline{\hspace{2cm}}$

10. $\underline{\hspace{2cm}} \times 10 = 2 \text{ tens}$

11. $\underline{\hspace{2cm}} \times 10 = 5 \text{ tens}$

12. $10 \times 4 \text{ tens} = \underline{\hspace{2cm}}$

13. $10 \times \underline{\hspace{2cm}} = 7 \text{ hundreds}$

14. $10 \times \underline{\hspace{2cm}} = 8 \text{ tens}$

15. $\underline{\hspace{2cm}} \times 10 = 3 \text{ tens}$

16. **Stretch Your Thinking** Lucas says that since 40×70 and 60×50 both have factors with a total of two zeros, they will both have products with a total of two zeros. Is he correct? Explain.

Homework

Draw a rectangle. Find the tens product, the ones product, and the total product. The first one is done for you.

1. 5×39

$39 =$	30	$+$	9	
5	$5 \times 30 = 150$	$5 \times 9 = 45$	$+$	$\begin{array}{r} 150 \\ 45 \\ \hline 195 \end{array}$

2. 7×32

3. 9×54

4. 3×47

Solve each problem.

Show your work.

5. Maria's flower garden is 14 feet long and 3 feet wide. How many square feet is her garden?

6. Maria planted 15 trays of flowers. Each tray had 6 flowers in it. How many flowers did she plant?

7. Write and solve a multiplication word problem about your family.

Remembering

Round each number to the nearest hundred.

1. 283 _____

2. 729 _____

3. 954 _____

Round each number to the nearest thousand.

4. 4,092 _____

5. 6,550 _____

6. 5,381 _____

Compare using $>$, $<$, or $=$.

7. 92,800 _____ 92,830

8. 165,000 _____ 156,000

9. 478,390 _____ 478,390

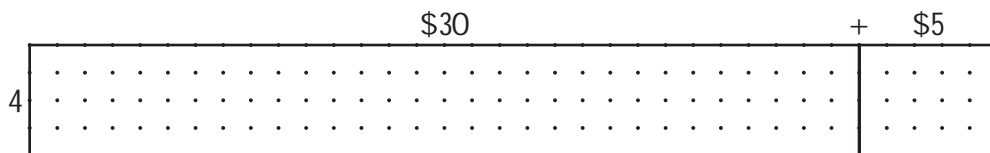
10. 736,218 _____ 89,479

Find each product by factoring the tens. Draw rectangles if you need to.

11. 3×2 , 3×20 , and 3×200

12. 7×3 , 7×30 , and 7×300

13. **Stretch Your Thinking** Write a word problem that could be solved using the rectangle model shown. Then solve the problem by finding the tens product, the ones product, and the total product.



Homework

Estimate each product. Solve to check your estimate.

1. 4×26

2. 5×63

3. 7×95

4. 4×84

5. 2×92

6. 3×76

Estimate the answers. Then solve each problem.

Show your work.

7. The Bicycling Club is participating in a cycling event. There are 65 teams registered for the event. Each team has a total of 8 cyclists. How many cyclists will participate in the event?

8. The theater group is making costumes for their play. There are 9 costume changes for each of the 23 performers. How many costumes does the theater group need?

9. The town library shows 6 different books each day in the display case. The library is open 27 days in one month. How many books does the library need for the display?

Write and solve a multiplication word problem.

10. _____

Remembering

Estimate each sum. Then solve to check your estimate.

1. $288 + 609$ _____

Solve.

Show your work.

2. During one weekend, a museum had 7,850 visitors on Saturday and 5,759 visitors on Sunday.

About how many visitors were there that weekend?

Exactly how many visitors were there that weekend?

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

3. 7×42

4. 5×67

5. **Stretch Your Thinking** Marcia says she can use *rounding* to find the *exact* product of 6×75 . She says that since 75 is halfway between 7 tens and 8 tens, the exact product of 6×75 must be halfway between 6×70 and 6×80 . Is she correct? Explain.

Homework

Use the Place Value Sections Method to solve the problem. Complete the steps.

1. 9×86 _____

86 = 80 + 6

9	\times	_____	=	_____
---	----------	-------	---	-------

9	\times	_____	=	_____
---	----------	-------	---	-------

+	_____
+	_____

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

2. 4×67 _____

67 = 60 + 7

4	\times	_____	=	_____
---	----------	-------	---	-------

4	\times	_____	=	_____
---	----------	-------	---	-------

67 =	_____	+	_____	
\times	4 =	_____	=	_____
_____	\times	_____	=	_____
_____	\times	_____	=	_____

Use any method to solve. Draw a rectangular model to represent the problem.

Show your work.

3. Natalia read her new book for 45 minutes each day for one week. How many minutes did she read after 7 days?

Remembering

The table shows the approximate height of the world's five tallest mountain peaks. Use the data in the table to help answer the following questions.

1. How tall are the two tallest mountain peaks combined?

2. Which two mountain peaks combined are 56,190 feet tall?

Mountain	Height (in feet)
Everest	29,035
K2	28,250
Kangchenjunga	28,169
Lhotse	27,940
Makalu	27,766

Subtract.

3. $586,720 - 293,415 =$ _____

4. $917,336 - 904,582 =$ _____

Estimate each product. Solve to check your estimate.

5. 5×39

6. 6×64

7. 9×23

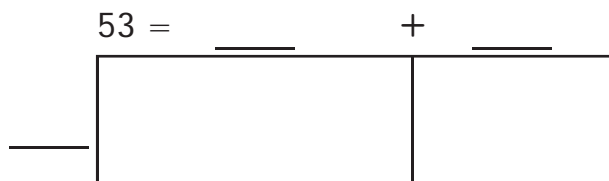
8. 7×48

9. **Stretch Your Thinking** Explain how the Expanded Notation Method is used to multiply 82×3 .

Homework

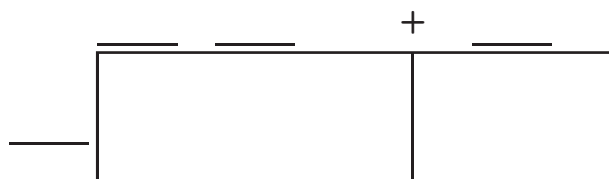
Use the Algebraic Notation Method to solve each problem. Complete the steps.

1. $7 \ 53$ _____



$$\begin{aligned} 7 \ 53 &= \text{_____} (\text{_____} + \text{_____}) \\ &= 350 + 21 \\ &= 371 \end{aligned}$$

2. $4 \ 38$ _____



$$\begin{aligned} 4 \ 38 &= \text{_____} (\text{_____} + \text{_____}) \\ &= \text{_____} + \text{_____} \\ &= \text{_____} \end{aligned}$$

Draw an area model and use the Algebraic Notation Method to solve the problem.

Show your work.

3. Mr. Henderson needs to get plywood to build his flatbed trailer. The flatbed is 8 feet by 45 feet. What is the area of the flatbed Mr. Henderson needs to cover with plywood?

Remembering

Subtract. Show your new groups.

$$\begin{array}{r} 1. \quad 4,000 \\ - 1,946 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 8,441 \\ - 7,395 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 9,340 \\ - 8,614 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 1,587 \\ - 1,200 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 6,193 \\ - 3,295 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 4,006 \\ - 2,631 \\ \hline \end{array}$$

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

7. 5×68 _____

8. **Stretch Your Thinking** Jenna made 6 bracelets using 32 beads each. Kayla made 7 bracelets using 29 beads each. Who used more beads? Use the Distributive Property to solve the problem.

Homework

Use any method to solve. Sketch a rectangle model, if you need to.

1. 7×62 _____

2. 6×63 _____

3. 6×82 _____

4. 57×7 _____

5. 5×76 _____

6. 4×65 _____

7. 7×83 _____

8. 36×9 _____

9. 27×8 _____

Solve each problem.

Show your work.

10. 94 people are sitting down to a fancy six-course meal. The first course is soup, which only needs a spoon. The rest of the courses each need fresh forks. How many forks will be used?

11. Leo uses plastic letters to make signs. A chain store asks Leo to put signs in front of their 63 stores that say "SALE: HALF PRICE ON ALL DRESSES." How many plastic "S" letters will Leo need?

Remembering

Subtract. Then use addition to check the subtraction.

Show your work.

1. $6,459 - 921 =$ _____

2. $5,603 - 3,284 =$ _____

Check: _____

Check: _____

3. $7,863 - 2,734 =$ _____

4. $9,582 - 1,447 =$ _____

Check: _____

Check: _____

Use the Algebraic Notation Method to solve each problem.

Complete the steps.

5. $4 \begin{array}{r} 93 \\ \times 4 \\ \hline \end{array}$ _____

6. $3 \begin{array}{r} 78 \\ \times 3 \\ \hline \end{array}$ _____

7. **Stretch Your Thinking** Xander says that the Place Value Sections Method, the Expanded Notation Method, and the Algebraic Notation Method of multiplying a one-digit number by a two-digit number are pretty much the same. Do you agree or disagree? Explain.

Homework

Solve, using any numerical method. Use rounding and estimating to see if your answer makes sense.

$$\begin{array}{r} 1. \quad 35 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 79 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 56 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 94 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 68 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 27 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 82 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 43 \\ \times 7 \\ \hline \end{array}$$

Solve each problem.

Show your work.

9. Describe how you solved one of the exercises above. Write at least two sentences.

10. Mariko wrote the full alphabet (26 letters) 9 times. How many letters did she write?

11. Alan has 17 packs of bulletin-board cutouts. Each one contains 9 shapes. How many shapes does he have altogether?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 6,095 \\ + 2,382 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 53,894 \\ - 12,914 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 629,137 \\ - 508,978 \\ \hline \end{array}$$

Solve each problem.

Show your work.

4. During the first half of a college basketball game, 24,196 people entered the athletic center. During the second half, 2,914 people left and 4,819 people entered. How many people were in the athletic center at the end of the game?

5. Miles had three sets of building blocks. His first set had 491 pieces. His second set had 624 pieces. Miles combined his three sets for a total of 1,374 pieces. How many pieces had been in his third set?

Use any method to solve. Sketch a rectangle model if you need to.

6. 6×23 _____

7. 8×44 _____

8. 3×95 _____

9. **Stretch Your Thinking** A bookcase has 3 shelves with 38 books each and 4 shelves with 29 books each. How many books are in the bookcase? Use any method to solve. Show your work.

Homework

Sketch rectangles and solve by any method that relates to your sketch.

1. 3×687 _____

2. 8×572 _____

3. 5×919 _____

4. 6×458 _____

5. A parking garage charges \$5 per vehicle to park. The garage has 327 spaces for vehicles. If the garage is full, how much money does garage make?

Show your work.

6. Susie's car can go about 342 miles on one tank of gasoline. She has filled her tank 4 times this month. About how many miles did Susie travel this month?

7. Zach filled his albums with 134 pages of trading cards. Each page holds 9 trading cards. How many trading cards does Zach have in his albums?

8. Write and solve a multiplication word problem involving a three-digit number.

Remembering

Answer each question about the information in the table.

1. What is the combined population of Midborough and Bigville?

2. How many more people live in Superburg than in Smalltown?

Population of Five Cities	
Smalltown	38,346
Midborough	49,725
Centervale	79,086
Bigville	123,267
Superburg	184,903

Use any method to solve. Sketch a rectangle model, if you need to.

3. $3 \times 91 =$ _____ 4. $7 \times 65 =$ _____ 5. $6 \times 84 =$ _____

Solve using any numerical method. Use rounding and estimating to see if your answer makes sense.

6.
$$\begin{array}{r} 45 \\ \times 7 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 28 \\ \times 9 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 81 \\ \times 7 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 56 \\ \times 3 \\ \hline \end{array}$$

10. **Stretch Your Thinking** Whether using the Place Value Sections Method, the Expanded Notation Method, or the Algebraic Notation Method, the same basic steps can be used to multiply a one-digit number by a three-digit number. Put these steps in order by numbering 1 through 3.

_____ Add the partial products.

_____ Write the three-digit number in expanded form.

_____ Multiply the one-digit number by each of the values in expanded form.

Homework

Cross out the extra numerical information and solve.

Show your work.

1. A gymnastic meet is 2 hours long. It has 8 competitors and each competes in 4 events. How many events will be scored?
- _____

2. George makes \$20 doing lawn work for 4 hours each week. He wants to buy a \$2,500 used car from his grandmother. He has been saving this money for 30 weeks. How much has he saved?
- _____

Tell what additional information is needed to solve the problem.

3. Michelle is saving \$20 each week for the bike of her dreams. How long until she can purchase her bike?
- _____

4. A teacher sees a sale on packages of pencils. She wants to give each of her students a pencil. How many packages should she buy?
- _____

Solve each problem and label your answer. Write hidden questions if you need to.

5. There are 18 windows on each side of a rectangular building. It takes the window washer 3 minutes to wash each window. How many minutes will it take to finish the job?
- _____

6. The school office prints a newsletter every month that uses 2 pieces of paper. They make 35 copies for each room. How many pieces of paper do they need to print copies for 10 rooms?
- _____

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 5,900 \\ - 1,386 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 54,371 \\ + 12,703 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 800,000 \\ - 753,192 \\ \hline \end{array}$$

Solve using any numerical method. Use rounding and estimating to check your work.

$$\begin{array}{r} 4. \quad 83 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 36 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 94 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 44 \\ \times 8 \\ \hline \end{array}$$

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

$$8. \quad 6 \times 358 = \underline{\hspace{2cm}}$$

$$9. \quad 4 \times 692 = \underline{\hspace{2cm}}$$

10. **Stretch Your Thinking** Write a word problem that involves multiplication and addition. Include extra numerical information. Solve the problem, showing your work.

Homework

Sketch an area model for each exercise. Then find the product.

1. 74×92 _____

2. 65×37 _____

3. 55×84 _____

4. 49×63 _____

5. 34×52 _____

6. 24×91 _____

7. Write a word problem for one exercise above.

Remembering

What is 851,632 rounded to the nearest:

1. hundred? _____

2. thousand? _____

3. ten thousand? _____

4. hundred thousand? _____

Compare using $>$, $<$, or $=$.

5. 58,320 58,320

6. 642,810 64,281

7. 427,900 428,000

8. 71,253 409,135

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

9. $6 \times 358 =$ _____

10. $4 \times 692 =$ _____

Tell what additional information is needed to solve the problem.

11. Rosalina knitted 8 scarves for gifts. She used 38 feet of yarn for each scarf. How much did Rosalina spend on the yarn?

12. **Stretch Your Thinking** How many smaller rectangles are there in an area model that represents 27×83 ? Why? What are their dimensions?

Homework

Multiply using any method. If you use an area model to multiply, show your sketch.

1. 45×79

2. 88×29

3. 74×57

4. 84×68

Mr. Gomez's class is learning about multiplication. The class wants to see what multiplications they can find in their school. Solve each problem.

5. The class counts 37 tiles across the front of their room and 64 tiles down one side. How many floor tiles are in their classroom?

6. The back of their classroom is a brick wall. Down one side, they count 26 rows of bricks. Across the bottom, they count 29 bricks. How many bricks make up the wall?

7. In the school, there are 3 classrooms for each grade: kindergarten, 1, 2, 3, 4, 5, and 6. Each classroom has 32 lockers. How many lockers are there in the school building?

8. The school auditorium has 69 rows of seats. Each row has 48 seats across. If 6,000 people want to see the school talent show, how many times do the students have to do the show?

Write two multiplication word problems of your own. Then solve each problem.

9. _____

10. _____

Remembering

Estimate each sum. Then solve to check your estimate.

1. $289 + 503$ _____

2. $4,199 + 684$ _____

3. $8,128 + 895$ _____

Cross out the extra numerical information and solve.

Show your work.

4. Marlene is making 4 batches of muffins for her drama party. Each batch requires 2 cups of flour and makes 24 muffins. How many muffins will Marlene have for the party?

5. One pack of batteries costs \$6 and contains 9 batteries. Trevor bought 3 packs of batteries. How much did Trevor spend on batteries?

Sketch an area model for each exercise. Then find the product.

6. 54×38 _____

7. 49×75 _____

8. **Stretch Your Thinking** Jackson used the Shortcut Method to multiply 84×37 . Did he do it correctly?

Explain.

$$\begin{array}{r}
 1 \\
 2 \\
 84 \\
 \times 37 \\
 \hline
 588 \\
 + 252 \\
 \hline
 840
 \end{array}$$

Homework

Solve each multiplication problem using any method. Use rounding and estimation to check your work.

1. 45×61

2. 24×56

3. 83×27

4. 39×48

5. 36×96

6. 63×87

7. 58×79

8. 15×92

9. 33×43

10. 76×29

11. 69×63

12. 84×23

Remembering

Subtract. Then use addition to check the subtraction.
Show your work.

1. $8,960 - 1,238 =$ _____

2. $5,418 - 5,269 =$ _____

Check: _____

Check: _____

Sketch an area model for each exercise. Then find the product.

3. 28×94 _____

4. 63×88 _____

Use any method to solve. Sketch an area model if you need to.

5. 66×24 _____

6. 27×83 _____

7. 79×35 _____

- 8. Stretch Your Thinking** Kia is printing packets of information. There are 23 pages in a packet, and she needs enough copies for 52 people. Each package of paper contains 200 sheets. She estimates she needs 5 packages of paper to print the packets. Will she have enough paper? Explain.

Homework

Solve using any method and show your work.

Check your work with estimation.

1. 55×64

2. 42×67

3. 59×32

4. 78×44

5. 62×23

6. 53×28

7. 71×35

8. 22×66

Solve.

Show your work.

9. Keesha walks 12 blocks to school every day. One day, she counts 88 sidewalk squares in one block. If each block has the same number of sidewalk squares, how many squares does Keesha walk on as she walks *to* and *from* school each day?

10. The Card Collector's Club is having a meeting. Each member brings 25 sports cards to show and trade. If 35 members attend, how many cards do they bring altogether?

11. On a separate sheet of paper, write and solve your own multiplication word problem.

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 4,659 \\ + 2,047 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 9,380 \\ + 1,599 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 248,266 \\ - 147,852 \\ \hline \end{array}$$

Use any method to solve. Sketch an area model if you need to.

$$4. \quad 26 \times 18$$

$$5. \quad 35 \times 64$$

$$6. \quad 82 \times 73$$

$$7. \quad 91 \times 23$$

Solve using any method. Use rounding and estimation to check your work.

$$8. \quad 17 \times 44$$

$$9. \quad 62 \times 74$$

$$10. \quad 53 \times 89$$

$$11. \quad 32 \times 96$$

12. **Stretch Your Thinking** Greyson is planning to lay a brick driveway which will be made up of 84 rows of 14 bricks per row. He will also lay a backyard patio with 25 rows of 31 bricks per row. How many pallets of bricks should Greyson order if each pallet has 1,000 bricks? Show your work.

Homework

Sketch a rectangle for each problem and solve using any method that relates to your sketch.

1. $8 \times 6,000$

2. $6 \times 3,542$

3. $7 \times 3,124$

4. $5 \times 7,864$

5. A school is participating in a pull tab program to raise money for a local organization. The school puts 1,295 pull tabs in each bag. The school has 7 bags of pull tabs. How many pull tabs has the school collected?

6. A dance company has scheduled 4 performances at a theater. The theater has 2,763 seats. Every ticket has been sold for each of the performances. How many tickets were sold in all?

7. An amusement park has about 3,600 visitors each day. About how many visitors does the amusement park have in one week?

Show your work

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 23,152 \\ - 10,894 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 308,000 \\ - 175,296 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 827,381 \\ + 154,338 \\ \hline \end{array}$$

Solve each multiplication problem using any method. Use rounding and estimation to check your work.

$$4. \quad 21 \times 36$$

$$5. \quad 48 \times 16$$

$$6. \quad 53 \times 99$$

$$7. \quad 64 \times 72$$

Solve using any method and show your work. Check your work with estimation.

$$8. \quad 45 \times 91$$

$$9. \quad 26 \times 33$$

$$10. \quad 47 \times 52$$

$$11. \quad 87 \times 14$$

12. Stretch Your Thinking Lily says that $4 \times 7,000$ has the same product as $7 \times 4,000$. Is she correct? Explain using the Associative Property of Multiplication.

Homework

On a separate sheet of paper, sketch a rectangle for each problem and solve using any method. Round and estimate to check your answer.

1. $5 \times 4,751$ _____

2. $7 \times 6,000$ _____

3. $6 \times 5,214$ _____

4. $8 \times 3,867$ _____

5. Describe the steps you used for one of your solutions to Exercises 1–4.

A fourth grade class is counting the supplies in the school's art closet. Help them to finish their count.

Show your work.

6. They have 6 rolls of white craft paper. The paper on the rolls is 1,275 feet long. How many feet of craft paper do they have altogether?

7. They counted 592 boxes of color pencils and 468 boxes of markers. If each box holds 8 pencils or markers, how many color pencils and markers do they have altogether?

8. They found 9 boxes of glass beads. There are 1,376 beads per box. How many glass beads do they have in all?

9. They found 7 cases of sketching paper. If each case has 2,500 sheets of paper, how many sheets of sketching paper do they have in all?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 82,905 \\ - 81,927 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 53,742 \\ + 93,587 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 400,000 \\ - 162,947 \\ \hline \end{array}$$

Solve.

Show your work.

4. Marta bought 18 sheets of stickers for her sticker album. Each sheet contained 32 stickers. How many stickers did Marta buy for her sticker album?

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

5. $3 \times 2,816$ _____

6. $7 \times 1,578$ _____

7. **Stretch Your Thinking** Zoe rounded $6 \times 8,493$ to $6 \times 8,000$. Andrew rounded $6 \times 8,493$ to $6 \times 9,000$. Who will have an estimate closer to the actual product? How do you know? Explain another way to estimate $6 \times 8,493$ that would give a better estimate.

Homework

Solve using any method and show your work. Check your work with estimation.

1. 6×88

2. 62×32

3. $3 \times 3,719$

4.
$$\begin{array}{r} 63 \\ \times 4 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 523 \\ \times 8 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 39 \\ \times 19 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 84 \\ \times 47 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 2,858 \\ \times 9 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 541 \\ \times 6 \\ \hline \end{array}$$

Solve.

10. Mr. Jackson goes on vacation for 22 days. He pays \$17 each day he is gone for Holly's Home Service to get the mail, walk the dog, and water the plants. How much does Mr. Jackson pay Holly's Home Service for the time he is on vacation?

11. A contractor needs to know the area of a sidewalk that is 2,381 feet long and 7 feet wide. What is the area of the sidewalk?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 38,560 \\ + 16,429 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 272,311 \\ - 164,838 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 815,007 \\ + 174,399 \\ \hline \end{array}$$

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

$$4. \quad 9 \times 4,572 \quad \underline{\hspace{2cm}}$$

$$5. \quad 4 \times 8,386 \quad \underline{\hspace{2cm}}$$

A grocery store clerk is ordering produce for the month. Help him find how many snap peas and garlic bulbs are in his order.

Show your work.

6. He orders 4 crates of snap peas. Each crate contains 3,275 snap peas. How many snap peas is he ordering?

7. He orders 9 boxes of garlic bulbs. Each box contains 1,930 bulbs of garlic. How many garlic bulbs is he ordering?

8. **Stretch Your Thinking** A videographer earns \$485 for every wedding he records and \$18 for every extra copy of the video his customers order. How much money does the videographer earn in a summer during which he records 34 videos and has 87 orders for extra copies? Show your work.

Homework

Solve using any method and show your work. Check your work with estimation.

1. 3×45

2. 32×82

3. $9 \times 2,477$

4.
$$\begin{array}{r} 86 \\ \times 4 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 419 \\ \times 6 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 76 \\ \times 39 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 23 \\ \times 95 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 6,965 \\ \times 8 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 746 \\ \times 5 \\ \hline \end{array}$$

Solve.

10. Simon makes an array that is 47 units wide and 33 units long. What is the area of Simon's array?

11. A farmer plants vegetables in rows. He plants 36 rows of carrots with 13 carrot seeds in each row. How many carrot seeds did the farmer plant?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 563,902 \\ - 153,884 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 327,148 \\ - 123,960 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 650,295 \\ + 101,586 \\ \hline \end{array}$$

Sketch a rectangle model and solve using any method.

Round and estimate to check your answer.

$$4. \quad 6 \times 3,916 \quad \underline{\hspace{2cm}}$$

$$5. \quad 7 \times 2,843 \quad \underline{\hspace{2cm}}$$

Solve using any method and show your work. Check your work with estimation.

$$6. \quad 7 \times 43 \quad \underline{\hspace{2cm}}$$

$$7. \quad 48 \times 26 \quad \underline{\hspace{2cm}}$$

$$8. \quad 4,715 \times 3 \quad \underline{\hspace{2cm}}$$

$$\begin{array}{r} 9. \quad 62 \\ \times 91 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 849 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 5,293 \\ \times 4 \\ \hline \end{array}$$

12. **Stretch Your Thinking** LaDonne has a budget of \$240 for new school clothes. She needs at least two new shirts, two new pairs of pants, and one new pair of shoes. The shirts cost \$18 each. The pants cost \$32 each. The shoes cost \$49 per pair. Plan two different combinations of numbers of shirts, pants, and shoes that LaDonne could buy within her budget. What is the total cost for each buying plan?

Homework

Divide with remainders.

1. $5 \overline{)29}$

2. $8 \overline{)34}$

3. $9 \overline{)75}$

4. $2 \overline{)13}$

5. $4 \overline{)39}$

6. $4 \overline{)30}$

7. $7 \overline{)45}$

8. $6 \overline{)38}$

9. $5 \overline{)39}$

10. $3 \overline{)25}$

11. $4 \overline{)31}$

12. $9 \overline{)35}$

13. $4 \overline{)27}$

14. $8 \overline{)29}$

15. $7 \overline{)22}$

16. $3 \overline{)26}$

17. $6 \overline{)37}$

18. $8 \overline{)42}$

Remembering

Write the number of thousands and the number of hundreds in each number.

1. 4,128

_____ thousands

_____ hundreds

2. 8,395

_____ thousands

_____ hundreds

3. 612

_____ thousands

_____ hundreds

Read and write each number in expanded form.

4. 94 _____

5. 752 _____

6. 3,576 _____

7. 8,109 _____

Read and write each number in standard form.

8. $200 + 30 + 7$ _____

9. $5,000 + 800 + 60$ _____

10. four hundred sixty-three

11. eight thousand, one hundred ten

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

12. 5×7 _____

13. 20×3 _____

14. 3×8 _____

15. 4×90 _____

16. 4×4 _____

17. 30×6 _____

18. **Stretch Your Thinking** Three vocabulary terms for division are shown in the division model. Use these terms to complete the multiplication sentence.

quotient
 divisor $\overline{\hspace{1cm}}$
 dividend

_____ \times _____ = _____

Homework

Solve. Use the Place Value Sections Method for division.

Charlie has 944 baseball cards in his collection. He places the cards in an album with exactly 4 cards on each page. How many pages does Charlie fill in his baseball card album? 236 pages

$$\begin{array}{r} \underline{200} + \underline{30} + \underline{6} = 236 \text{ pages} \\ 4 \begin{array}{|c|c|c|} \hline 944 & 144 & 24 \\ \hline - 800 & - 120 & - 24 \\ \hline 144 & 24 & 0 \\ \hline \end{array} \end{array}$$

1. A hardware store has 834 planks of wood to deliver to 6 building sites. If each site gets the same number of planks, how many planks should each building site get? _____

$$\begin{array}{|c|c|c|} \hline \underline{\quad}00 + \underline{\quad}0 + \underline{\quad} = \underline{\quad} \\ \hline \end{array}$$

Solve. Use the Expanded Notation Method for division.

2. A park planner is designing a rectangular butterfly garden. The plan is for the garden to have an area of 1,917 square feet. If the garden is 9 feet wide, how long is it? _____

$$\begin{array}{r} \underline{\quad} \\) \end{array}$$

3. A family drives 1,498 miles from Boston, Massachusetts to Miami, Florida. If they drive the same number of miles each day for 7 days, how many miles will they drive each day? _____

$$\begin{array}{r} \underline{\quad} \\) \end{array}$$

Remembering

Round each number to the nearest hundred.

1. 591 _____

2. 827 _____

3. 457 _____

Round each number to the nearest thousand.

4. 7,129 _____

5. 6,742 _____

6. 1,028 _____

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

7. 4×29

8. 8×36

Divide with remainders.

9. $7 \overline{)38}$

10. $4 \overline{)29}$

11. $3 \overline{)14}$

12. **Stretch Your Thinking** Divide 594 by 3 using the Place Value Sections Method and Expanded Notation Method. Explain how you can check your answer using multiplication.

$$3 \begin{array}{|c|c|c|} \hline \text{ } & \text{ } & \text{ } \\ \hline \end{array}$$

$$3 \overline{)594}$$

Homework

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

1. $\underline{\quad}0 + \underline{\quad} = \underline{\quad}$

6	564	
---	-----	--

 $6 \overline{)564}$

2. $\underline{\quad}0 + \underline{\quad} = \underline{\quad}$

7	245	
---	-----	--

 $7 \overline{)245}$

3. $\underline{\quad},000 + \underline{\quad}00 + \underline{\quad}0 + \underline{\quad} = \underline{\quad}$

5	9,675			
---	-------	--	--	--

 $5 \overline{)9,675}$

4. $\underline{\quad},000 + \underline{\quad}00 + \underline{\quad}0 + \underline{\quad} = \underline{\quad}$

4	9,536			
---	-------	--	--	--

 $4 \overline{)9,536}$

Remembering

Read and write each number in word form.

1. 73,894 _____

2. 220,508 _____

3. 1,000,000 _____

4. 915,007 _____

Estimate each product. Solve to check your estimate.

5. 6×42

6. 3×19

7. 5×78

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

8. A ball pit at an entertainment center contains 2,120 balls. The balls are cleaned regularly by a machine which can hold a certain number of balls at once. If the machine must be run 8 times to clean all the balls, how many balls fit in the machine at one time?

_____ $8 \overline{)2,120}$

8 $\begin{array}{|c|c|c|} \hline \text{___}00 & + & \text{___}0 & + & \text{___} & = & \text{___} \\ \hline 2,120 & & & & & & \\ \hline \end{array}$

9. **Stretch Your Thinking** How many digits will be in the quotient of 588 divided by 6? Use place value to explain.

Homework

Divide.

1. $6 \overline{)2,142}$

2. $4 \overline{)886}$

3. $8 \overline{)576}$

4. $5 \overline{)8,265}$

5. $3 \overline{)795}$

6. $9 \overline{)2,664}$

7. $6 \overline{)259}$

8. $7 \overline{)952}$

9. $3 \overline{)7,459}$

Solve.

Show your work.

10. For the school field day, students are divided into 5 same-size teams. Any extra students will serve as substitutes. If 243 students participate, how many students will be on each team? How many substitutes will there be?
- _____

11. A fruit stand sells packages containing 1 peach, 1 pear, 1 apple, 1 banana, and 1 mango each. One week they sold a total of 395 pieces of fruit. How many packages did they sell?
- _____

Remembering

Compare using $>$, $<$, or $=$.

1. 258,800 \bigcirc 258,700

2. 142,367 \bigcirc 342,367

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

3. $7 \overline{) 28}$ _____

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

4. _____ 00 + _____ 0 + _____ = _____

$4 \overline{) 1,036}$

4	1,036		
---	-------	--	--

5. **Stretch Your Thinking** Jenna divides 2,506 by 4.

Explain the error in Jenna's solution. Then show the correct solution.

$$\begin{array}{r}
 604 \\
 4 \overline{) 2,506} \\
 \underline{- 24} \\
 1 \\
 \underline{- 0} \\
 16 \\
 \underline{- 16} \\
 0
 \end{array}$$

Homework

Use any method to solve.

1. $5 \overline{)652}$

2. $4 \overline{)940}$

3. $6 \overline{)840}$

4. $7 \overline{)942}$

5. $5 \overline{)6,502}$

6. $6 \overline{)8,370}$

7. $4 \overline{)5,267}$

8. $8 \overline{)9,161}$

Solve.

9. Joe had 145 peanuts in a bag. He fed all of the peanuts to the 5 squirrels that he saw. If each squirrel got the same number of peanuts, how many peanuts did each squirrel get?

10. There were 1,148 students at Jefferson High School who wanted to go on a field trip. Since they could not all go at the same time, they went in 7 equal groups. How many students were in each group?

11. A printing company has 1,080 ink cartridges to be packed in 9 shipping boxes. If each box holds the same number of cartridges, how many ink cartridges will be packed in each box?

Remembering

The table shows the water surface area of each of the Great Lakes. Use the data in the table to answer the following questions.

1. What is the combined surface area of the two Great Lakes with the greatest surface area?

2. Which is greater, the surface area of Lake Michigan or the sum of the surface areas of Lake Erie and Lake Ontario?

Lake	Surface Area (square kilometers)
Erie	25,655
Huron	59,565
Michigan	57,753
Ontario	19,009
Superior	82,097

Use any method to solve. Sketch a rectangle model, if you need to.

3. 4×39 _____ 4. 3×71 _____ 5. 7×62 _____

Divide. Show your work.

6. $5 \overline{)1,985}$

7. $6 \overline{)253}$

8. $7 \overline{)1,477}$

9. **Stretch Your Thinking** Which method do you prefer for division: the Place Value Sections Method, Expanded Notation Method, or Digit-by-Digit Method? Explain. Then solve $6,583 \div 4$ using your preferred method.

Homework

Solve.

1. $3 \overline{21}$

$3 \overline{22}$

$3 \overline{23}$

$3 \overline{24}$

$3 \overline{25}$

2. $7 \overline{21}$

$7 \overline{22}$

$7 \overline{23}$

$7 \overline{24}$

$7 \overline{25}$

3. Describe how the repeating pattern in row 1 is different from the pattern in row 2. Explain why.

Use any method to solve.

4. $9 \overline{2,359}$

5. $2 \overline{5,389}$

6. $4 \overline{1,648}$

7. $5 \overline{1,456}$

8. $8 \overline{2,506}$

9. $6 \overline{8,473}$

Solve.

Show your work.

10. Mr. James arranged his collection of 861 baseball cards in 7 equal rows. How many cards were in each row?

11. A shoe company has 9,728 pairs of shoes to be divided equally among 8 stores. How many pairs of shoes will each store get?

Remembering

Write a number sentence that shows an estimate of each answer. Then write the exact answer.

1. $413 + 382$ _____

2. $880 + 394$ _____

3. $7,056 + 798$ _____

Sketch rectangles and solve by any method that relates to your sketch.

4. 8×415 _____

5. 6×853 _____

Use any method to solve.

6. $7 \overline{)325}$

7. $5 \overline{)7,390}$

8. $6 \overline{)9,329}$

9. **Stretch Your Thinking** Toby is choosing from two bead art projects. Project A uses equal numbers of red, black, and green beads totaling 825 beads. Project B uses equal numbers of black, blue, green, and yellow beads totaling 1,020 beads. Toby has 260 green beads and doesn't want to purchase more green beads. Explain which of the two bead projects Toby should choose.

Homework**Solve.**

1. $4 \overline{21}$

4 $\overline{22}$

4 $\overline{23}$

4 $\overline{24}$

4 $\overline{25}$

2. $6 \overline{21}$

6 $\overline{22}$

6 $\overline{23}$

6 $\overline{24}$

6 $\overline{25}$

3. Describe how the repeating pattern in row 1 is different from the pattern in row 2. Explain why.

Use any method to solve.

4. $8 \overline{6,726}$

5. $7 \overline{9,259}$

6. $3 \overline{1,504}$

7. $2 \overline{8,037}$

8. $9 \overline{3,385}$

9. $5 \overline{2,347}$

10. $6 \overline{9,003}$

11. $4 \overline{8,360}$

Solve.

12. Altogether, the members of an exercise club drink 840 bottles of water each month. Each member drinks 8 bottles. How many members are there?

13. There are 7,623 pencils ready to be packaged in boxes at a factory. Each box holds 6 pencils. How many full boxes of pencils can be packaged?

Remembering

Subtract. Show your new groups.

$$\begin{array}{r} 1. \quad 5,267 \\ - 1,390 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 9,000 \\ - 2,482 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6,129 \\ - 5,773 \\ \hline \end{array}$$

Cross out the additional numerical information and solve.

Show your work.

4. Rick is selling fresh-squeezed lemonade for \$2 a serving. Rick makes each serving with 2 lemons and 4 tablespoons of sugar. If he sells 27 servings of lemonade, how much sugar does he use?

5. An animal shelter receives 9 large bags of dog food every month for 14 years. Each bag weighs 55 pounds. How many pounds of dog food does the animal shelter receive each month?

Solve using any method.

$$6. \quad 3 \overline{)452}$$

$$7. \quad 8 \overline{)527}$$

$$8. \quad 4 \overline{)3,693}$$

9. **Stretch Your Thinking** What is the greatest remainder you could have with the divisor 3? With the divisor 8? With the divisor 5? Explain.

Homework

Solve by any method on a separate sheet of paper.
Then check your answer by rounding and estimating.

1. $3 \overline{)246}$

2. $6 \overline{)75}$

3. $7 \overline{)60}$

4. $3 \overline{)256}$

5. $4 \overline{)805}$

6. $5 \overline{)927}$

7. $4 \overline{)325}$

8. $4 \overline{)378}$

9. $6 \overline{)432}$

10. $5 \overline{)1,838}$

11. $4 \overline{)2,715}$

12. $7 \overline{)3,042}$

Solve.

Show your work.

13. The area of Matt's rectangular bedroom is 96 square feet.
If the room is 8 feet wide, how long is it?

14. The fourth-grade students at Lincoln Elementary School are attending an assembly. There are 7 equal rows of seats in the assembly hall. If there are 392 fourth-grade students, how many students will sit in each row?

15. Pablo is packing books into crates. He has 9 crates. Each crate will contain the same number of books. If he has 234 books, how many books can he put into each crate?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 1,429 \\ + 3,882 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 28,178 \\ - 13,428 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 500,000 \\ - 61,835 \\ \hline \end{array}$$

Sketch an area model for each exercise. Then find the product.

4. 27×59 _____

5. 36×92 _____

Solve using any method.

6. $9 \overline{)271}$

7. $6 \overline{)2,436}$

8. $4 \overline{)2,139}$

9. **Stretch Your Thinking** Katherine is considering two new cell phone plans. She doesn't want to spend more for minutes she won't use. One plan allows up to 250 minutes per month for \$49, and the other plan allows up to 350 minutes per month for \$65. In the last 6 months, she used 1,470 minutes. Use estimating and an exact answer to determine the best cell phone plan for Katherine.

Homework

Solve. Write the remainder as a whole number.

1. $7 \overline{)7,012}$

2. $9 \overline{)8,410}$

3. $2 \overline{)7,825}$

4. $5 \overline{)3,512}$

5. $6 \overline{)6,618}$

6. $8 \overline{)7,225}$

Solve. Then explain the meaning of the remainder.

7. Principal Clements wants to buy a pencil for each of the 57 fourth-graders in her school. The pencils come in packages of 6. How many packages does Principal Clements need to buy?

8. Tyler has 71 CDs in his collection. He places the CDs in a book that holds 4 CDs on each page. If Tyler fills each page, how many CDs will be on the last page?

9. Amanda and her family are hiking a trail that is 46 miles long. They plan to hike exactly 7 miles each day. How many days will they hike exactly 7 miles?

10. Cesar makes 123 ounces of trail mix. He puts an equal number of ounces in each of 9 bags. How many ounces of trail mix does Cesar have left over?

Remembering

The table shows the word count for each of five books in a series. Use the table to answer each question. Estimate to check.

1. How many more words are there in Book 2 than in Book 1?

2. What is the difference between the book with the greatest number of words and the book with the least number of words?

Book	Word Count
1	82,647
2	91,313
3	109,842
4	73,450
5	90,216

Solve each multiplication problem using any method. Use rounding and estimation to check your work.

3. 39×52

4. 81×76

5. 18×63

6. 45×91

Solve using any method. Then check your answer by rounding and estimating.

7. $7 \overline{)65}$

8. $3 \overline{)289}$

9. $8 \overline{)5,024}$

10. **Stretch Your Thinking** Write a word problem that is solved by $43 \div 5 = 8 \text{ R}3$, in which the remainder is the only part needed to answer the question.

Homework

When the Kent Elementary School fourth-grade classes were studying butterflies, they took a field trip to a butterfly garden.

Use the correct operation or combination of operations to solve each problem.

Show your work.

1. Nine buses of students, teachers, and parents went on the field trip. If 5 of the buses held 63 people each and the other buses held 54 people each, how many people went in all?

2. Some female butterflies lay their eggs in clusters. If one kind of butterfly lays 12 eggs at a time and another kind lays 18 eggs at a time, how many eggs would 8 of each kind of butterfly lay?

3. Teachers divided students into groups of 3. Each group of 3 wrote a report that had 9 pictures in it. The students used 585 pictures altogether. How many students were there in all?

4. Driving to and from the butterfly garden took 45 minutes each way. The students spent 3 hours in the garden and 30 minutes eating lunch. If the groups left the school at 9:00 A.M., what time did they get back?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 5,833 \\ - 2,159 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 49,802 \\ + 15,658 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 98,139 \\ - 27,345 \\ \hline \end{array}$$

Sketch rectangles and solve by any method that relates to your sketch.

4. $5 \times 6,294$ _____

5. $8 \times 1,375$ _____

Solve. Then explain the meaning of the remainder.

6. Vince has 138 artist trading cards. _____

He is arranging them in an album that can hold 4 to a page. If Vince fills each page as he goes, how many cards are on the last page?

7. Amber is doing an online math drill program. She has exactly 300 seconds to complete as many problems as she can. If it takes Amber 7 seconds to do each problem, how many problems does she complete?

8. **Stretch Your Thinking** In the fall, Wesley swam a race in 58 seconds, and Aiden swam it in 54 seconds. In the spring, they swam the same race. Wesley did it in 53 seconds, and Aiden did it in 52 seconds. How much more of an improvement was one boy's race time over the other boy's race time? Explain.

Homework

Divide.

Show your work.

1. $5 \overline{)456}$

2. $4 \overline{)1,247}$

3. $7 \overline{)829}$

4. $6 \overline{)2,254}$

5. $3 \overline{)729}$

6. $8 \overline{)658}$

7. $9 \overline{)4,437}$

8. $5 \overline{)3,649}$

9. $6 \overline{)875}$

Solve.

Show your work.

10. Sharon has 1,278 beads to make bracelets. She sorts them into 6 different containers so she can have an equal amount of beads in each container. How many beads will Sharon put in each container?
-

11. Kyle collects baseball cards. He places his cards into an album that has 9 cards on each page. He has a total of 483 baseball cards. He fills each page before putting cards on the next page. How many cards will be on the last page?
-

Remembering

Answer each question about the information in the table.

1. What was the total amount donated to the theatre in 2007 and 2009 combined?

2. How much more was donated in 2010 than in 2006?

Donations to a Children's Theatre

Year	Donations
2006	\$26,304
2007	\$28,315
2008	\$63,418
2009	\$53,237
2010	\$86,061

Solve using any method and show your work.

Check your work with estimation.

3. 26×6 _____

4. 932×7 _____

5. $2,107 \times 8$ _____

Use the correct operation or combination of operations to solve the problem.

Show your work.

6. Selena sold 9 homemade bracelets for \$12 each and 14 pairs of earrings for \$8 each. How much did she make in sales?

7. **Stretch Your Thinking** At a skating rink, Emma makes 21 laps at a steady pace during a 5-minute song. She divided $21 \div 5 = 4 \text{ R}1$ and says that means she did $4 + 1 = 5$ laps each minute. Explain Emma's error.

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

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. $c = 3$

$4(7 - c)$

18. $r = 2$

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

19. $w = 7$

$(72 \div 9)w$

20. $m = 0$

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

21. $h = 14$

$45 \div (h - 5)$

22. $p = 19$

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

23. $v = 6$

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

24. $t = 1$

$(7 - 2) \div t$

25. $g = 10$

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

Solve for \square or n .

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

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

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

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

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

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

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

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

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

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

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

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

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. $5 + 2 + 6 \bigcirc 6 + 7$

2. $90 \bigcirc 110 - 9$

3. $70 \bigcirc 30 + 30$

4. $70 \bigcirc 95 - 25$

5. $2 + 8 + 10 \bigcirc 30$

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

7. $51 + 99 \bigcirc 150$

8. $35 \bigcirc 100 - 55$

9. $50 \bigcirc 20 + 5 + 20$

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.

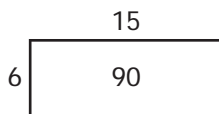
4. $(12 - 4) \cdot (6 + 3) =$ _____

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. $5 \overline{)68}$ _____

$68 =$	_____	+	_____

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

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

2. $\underline{\quad}0 + \underline{\quad} =$

3	234	
---	-----	--

$3 \overline{)234}$

3. $\underline{\quad}0 + \underline{\quad} =$

9	468	
---	-----	--

$9 \overline{)468}$

Write = or \circlearrowleft to make each statement true.

4. $40 + 40 \circlearrowleft 90$

5. $12 - 4 \circlearrowleft 12 + 4$

6. $4 + 7 \circlearrowleft 4 + 2 + 5$

7. $26 \circlearrowleft 30 - 4$

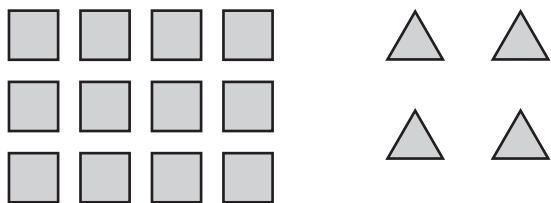
8. $8 + 10 + 2 \circlearrowleft 20$

9. $85 - 25 \circlearrowleft 65$

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?

Remembering

Solve using any numerical method. Use rounding and estimating to see if your answer makes sense.

$$\begin{array}{r} 1. \quad 71 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 36 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 94 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 77 \\ \times 6 \\ \hline \end{array}$$

Divide.

$$5. \quad 6 \overline{)89}$$

$$6. \quad 5 \overline{)485}$$

$$7. \quad 4 \overline{)743}$$

Solve each equation.

$$8. \quad 9 \times n = 108$$

$$9. \quad 40 \div t = 10$$

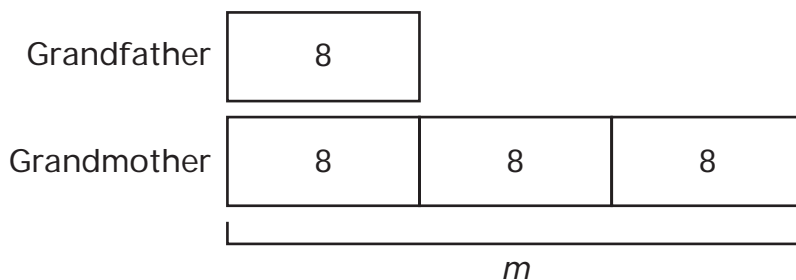
$$10. \quad r = 56 \div 7$$

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

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

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

11. **Stretch Your Thinking** Write and solve a word problem to match the comparison bars shown below.



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?

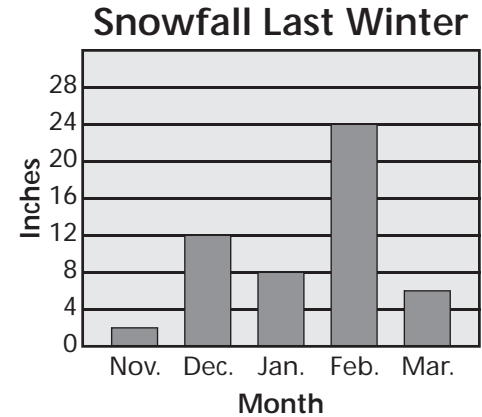
2. How many fewer inches of snow were recorded in March than were recorded in February?

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*.



Remembering

Sketch an area model for each exercise. Then find the product.

1. 28×45 _____

2. 53×96 _____

Solve using any method.

3. $9 \overline{)506}$

4. $2 \overline{)538}$

5. $7 \overline{)8,165}$













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


Show your work.

6. Benjamin received 52 emails at work today. This is 4 times as many emails as he received yesterday. How many emails did Benjamin receive yesterday?

7. There are 327 third-grade students on a field trip at the history museum. There are 423 fourth-grade students on the same field trip. How many fewer third-grade students are there than fourth-grade students on the field trip?

8. **Stretch Your Thinking** Look at the graph. Tatiana says there are 4 more dog owners than fish owners in the classroom. Explain Tatiana's error. Then write an equation that compares the numbers of dog owners and fish owners in the classroom.

Pet Owners in the Classroom	
Pet	
Cat	  
Bird	
Dog	     
Fish	 

 = 2 students

Homework

Use an equation to solve.

Show your work.

1. The soccer club has 127 members. The baseball club has 97 members. Both clubs will meet to discuss a fundraiser. The members will be seated at tables of 8 members each. How many tables will they use?
-

2. A hardware store pays \$3,500 for 42 lawnmowers. Then the store sells the lawnmowers for \$99 each. How much profit does the store make from the lawnmower sales?
-

3. George buys a set of 224 stamps. He gives 44 stamps to a friend. Then he places the remaining stamps into an album with 5 stamps on each page. How many pages does he fill in his album?
-

4. Shane and his family go to the movie theater and buy 6 tickets for \$12 each. Then they spend a total of \$31 for popcorn and drinks. How much did Shane and his family spend for tickets, popcorn and drinks at the movie theater?
-

5. Last year, 226 people attended the school graduation ceremony. This year, the school expects 125 more people than last year. The school has arranged for a van to transport people from the parking area to the ceremony. Each van holds 9 people. How many trips will the van make?
-

Remembering

Solve each multiplication problem, using any method.

Use rounding and estimation to check your work.

1. 22×58

2. 34×91

3. 63×72

4. 17×56

Solve by using any method. Then check your answer by rounding and estimating.

5. $9 \overline{)39}$

6. $4 \overline{)168}$

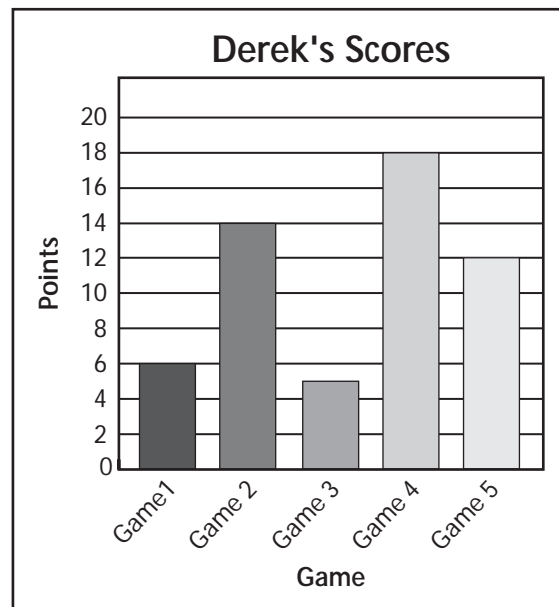
7. $5 \overline{)4,204}$

The graph shows the number of points Derek scored during his first five basketball games.

8. Write a multiplication equation and a division equation that compare the number of points Derek scored during Game 1 (x) to the number of points Derek scored during Game 4 (y).

9. **Stretch Your Thinking** There will be 138 people at a fundraising auction. Each table seats six. An additional 3 tables are needed to display the auction items. What is the minimum number of tables that are needed for the fundraiser? Which equation *cannot* be used to answer this question? Explain.

$$138 \div (6 + 3) = t \qquad (138 \div 6) + 3 = t$$



Homework

Use an equation to solve.

Show your work.

1. Rosa and Kate both went shopping. Kate bought a jacket for \$45 and boots for \$42. Rosa bought jeans for \$27, a sweater for \$22, and sneakers. They both spent the same exact amount of money. How much were Rosa's sneakers?

2. Kyle works at a bakery on weekends. On Saturday, Kyle needs to make 120 muffins. Each recipe makes 8 muffins and uses 2 cups of flour. On Sunday, he needs to bake a large batch of cookies that uses 6 cups of flour. How many cups of flour will Kyle use to bake the muffins and the cookies?

3. A toy factory made 715 small stuffed bears and packed them in boxes with 5 bears in each box. Then they made 693 large stuffed bears and packed them in boxes with 3 bears in each box. All the boxes of small and large stuffed bears are loaded into a truck for delivery. How many boxes are loaded into the truck?

4. Last summer, Chris went to Europe and bought postcards from the cities he visited. In France, he visited 6 cities and bought 11 postcards in each city. In Italy, he visited 7 cities and bought 9 postcards in each city. In Spain, he visited 10 cities and bought 15 postcards in each city. How many postcards did Chris buy in Europe?

5. Three fourth grade classes went on a field trip to see a play. Each class had 19 students and 2 adults attending. The rows in the playhouse each seat 9 people. How many rows did the fourth grade classes and adults take up at the playhouse?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 9,000 \\ - 5,613 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 317,492 \\ + 36,057 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 659,741 \\ - 652,438 \\ \hline \end{array}$$

Solve. Then explain the meaning of the remainder.

4. Jessica needs to bake 50 muffins.
Her baking pan holds 12 muffins.
How many rounds of baking will she
need to do?

Use an equation to solve.

Show your work.

5. At the fair, Hannah bought her family 5 hot dogs for \$3 each and a pitcher of lemonade for \$6. How much money did she spend in all?

6. Reggie is keeping 7 of his 31 stuffed animals and splitting the remainder of his collection evenly among his 3 younger sisters. How many stuffed animals does each sister get?

7. **Stretch Your Thinking** Write a word problem using the equation $(\$60 + \$3 - \$15) \div \$4 = w$. Then solve the equation to solve the problem.

Homework

Solve each problem.

1. $5 \times 7 + 9 = t$

2. $9 \times (1 + 3) = m$

3. $7 - 2 \times 2 = k$

4. $(7 \times 2) + (4 \times 9) = w$

5. $(7 - 2) \times (3 + 2) = r$

6. $8 \times (12 - 7) = v$

7. Whitney and Georgia are at the snack bar buying food for their family. Sandwiches cost \$4 each. Salads cost \$2 each. How much money will it cost them to buy 5 sandwiches and 7 salads?

8. Lisa put tulips and roses into vases. Each vase has 12 flowers. The red vase has 7 tulips. The blue vase has twice as many roses as the red vase. How many roses are in the blue vase?

9. Pam has 9 bags of apples. Each bag contains 6 apples. There are 3 bags of red apples and 1 bag of green apples. The rest of the bags contain yellow apples. How many more yellow apples are there than red apples?

10. Clay works on a farm. He packaged eggs into containers that hold 1 dozen eggs each. He filled 4 containers with white eggs and 5 containers with brown eggs. How many eggs did Clay collect? Hint: one dozen eggs = 12 eggs

Remembering

Subtract. Show your new groups.

$$\begin{array}{r} 1. \quad 3,146 \\ - 1,960 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 7,504 \\ - 2,738 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6,000 \\ - 5,241 \\ \hline \end{array}$$

Solve using any method and show your work.

Use estimation to check your work.

$$4. \quad 23 \times 88$$

$$5. \quad 71 \times 49$$

$$6. \quad 62 \times 67$$

$$7. \quad 15 \times 38$$

Use an equation to solve.

8. An audio book is made up of 8 CDs. Each of the first 7 CDs is 42 minutes long and the final CD is 26 minutes long. Mark plans to listen to the book the same number of minutes for 8 days. How many minutes each day will Mark listen to the audio book?
- _____

9. **Stretch Your Thinking** A sign shows the price per pound for several bulk food items. Use the information to write a word problem that requires at least 3 steps to solve. Then solve your problem
- _____
- _____
- _____
- _____
- _____
- _____
- _____

Food Item	Cost per pound
mixed nuts	\$5
dried fruit	\$3
snack mix	\$7
wild rice	\$2
red lentils	\$4

Homework

List all the factor pairs for each number.

1. 49

2. 71

3. 18

4. 57

Write whether each number is *prime* or *composite*.

5. 50

6. 29

7. 81

8. 95

9. 19

10. 54

Tell whether 6 is a factor of each number. Write *yes* or *no*.

11. 6

12. 80

13. 36

14. 72

Tell whether each number is a multiple of 8. Write *yes* or *no*.

15. 64

16. 32

17. 88

18. 18

Use the rule to complete the pattern.

19. Rule: skip count by 11

11, 22, _____, _____, 55, _____, _____, 88, 99

20. Rule: skip count by 9

9, _____, 27, _____, 45, _____, 63, _____, 81, _____

21. Rule: skip count by 8

8, 16, 24, _____, _____, _____, _____, 64, 72, _____

Remembering

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

1. $8 \times 1,593$ _____

2. $3 \times 6,247$ _____

Use the correct operation or combination of operations to solve the problem.

3. Melina has 4 sheets of wacky face stickers with 24 stickers on each sheet. Melina cuts each sticker individually from the sheet. She then divides them evenly into 3 piles to give to friends. How many stickers are in each pile?

Solve.

4. $5 \times 4 + 7 = g$ _____

5. $(3 \times 7) + (2 \times 10) = h$ _____

6. $16 - (5 \times 3) = m$ _____

7. $(9 - 3) \times (2 + 7) = l$ _____

8. $(12 - 8) + (3 \times 3) = p$ _____

9. $(24 \div 4) + 19 = t$ _____

10. **Stretch Your Thinking** Use *prime* or *composite* to complete the sentence. Then explain your choice.

All even numbers greater than 2 are _____.

Homework

Use the rule to find the next three terms in the pattern.

1. 2, 6, 18, 54, ...

Rule: multiply by 3

2. 115, 145, 175, 205, 235, ...

Rule: add 30

Use the rule to find the first ten terms in the pattern.

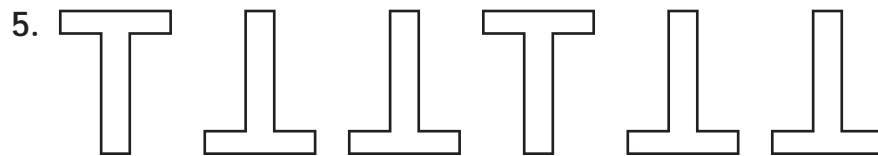
3. First term: 12

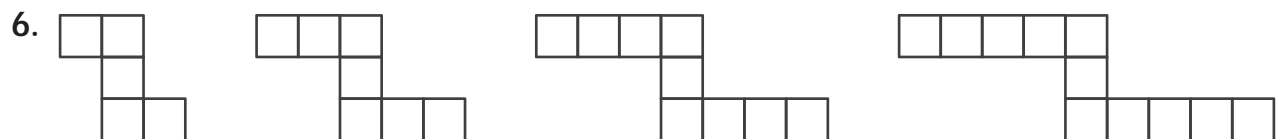
Rule: add 25

Make a table to solve.

4. Jay saves \$2 in June, \$4 in July, \$6 in August, and \$8 in September. If the pattern continues, how much money will Jay save in December?

Describe the next term of each pattern.





Remembering

Subtract.

$$\begin{array}{r} 1. \quad 491,562 \\ - 208,723 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 392,119 \\ - 48,319 \\ \hline \end{array}$$

Solve.

Show your work.

3. Sid unpacks 8 cartons of paper clips. Each carton contains 3,500 paper clips. How many paper clips is this altogether?

4. Camille unpacks 102 boxes of red pens and 155 boxes of blue pens. Each box contains 8 pens. How many pens does she unpack altogether?

List all of the factor pairs for each number.

5. 55 _____

6. 14 _____

7. **Stretch Your Thinking** During the first week of the year, Angelina's dad gives her \$10 and says that he will give her \$10 more each week for the rest of the year. At the end of the year, how much money will Angelina receive from her dad? (Hint: 1 year = 52 weeks) Make a table to show the pattern, and explain your answer.

Homework

1. Design the blank pot below by drawing a pattern that meets the following conditions.
 - ▶ At least three different shapes are used.
 - ▶ The pattern begins with a square or a circle.
 - ▶ The pattern is repeated at least two times.
 - ▶ At least two different colors are used.



2. Describe your pattern.

3. Suppose 184 students from Wilson Middle School complete this page at home. If each student draws 9 shapes on his or her pot, how many shapes in all would be drawn?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 8,500 \\ - 1,265 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 24,187 \\ - 14,856 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 683,519 \\ + 292,744 \\ \hline \end{array}$$

Solve using any method and show your work. Check your work with estimation.

$$\begin{array}{r} 4. \quad 19 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 649 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 2,934 \\ \times 8 \\ \hline \end{array}$$

Use the rule to find the next five terms in the pattern.

7. 3, 6, 12, 24, ...

Rule: multiply by 2

8. 25, 60, 95, 130, ...

Rule: add 35

Use the rule to find the first ten terms in the pattern.

9. First term: 18

Rule: add 12

10. **Stretch Your Thinking** For a cookie exchange, Kaiya bakes 2 pans of 12 chocolate chip cookies each, 3 pans of 16 lemon drops each, and 4 pans of 10 peanut butter cookies each. She is dividing the cookies into 8 tins, with an equal number of each type of cookie in each tin. How many of each type of cookie will be in each tin? How many cookies in all will be in each tin? Explain.
