

3-1 Homework

Name _____

Date _____

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 $8 \overline{)42}$

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.

$$\begin{array}{r} \text{quotient} \\ \text{divisor} \overline{) \text{dividend}} \end{array}$$

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

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.

$$\begin{array}{r} \underline{\quad}00 \quad + \quad \underline{\quad}0 \quad + \quad \underline{\quad} \quad = \quad \underline{\quad} \\ 3 \quad \boxed{\begin{array}{|c|c|c|} \hline 594 & & \\ \hline \end{array}} \end{array}$$

$$3 \overline{)594}$$

3-3 Homework

Name _____

Date _____

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			
---	-------	--	--	--

 $4 \overline{)9,536}$

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

__ 00	+	__ 0	+	__	=	__
2,120						

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

**3-4
Homework**

Name _____

Date _____

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?
- _____

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

1 $258,800$ ○ $258,700$

2 $142,367$ ○ $342,367$

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

3 $7 \cdot 28$ _____

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

4 _____ 00 + _____ 0 + _____ = _____

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

$$4 \overline{)1,036}$$

- 5 **Stretch Your Thinking** Jenna divides 2,506 by 4. Explain the error in Jenna's solution. Then show the correct solution.

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

**3-5
Homework**

Name _____

Date _____

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?

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.

3-6 Homework

Name _____

Date _____

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 the pattern of dividends and quotients in each row in Exercises 1–2.

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?

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.

**3-7
Homework**

Name _____

Date _____

Solve.

① $4\overline{)21}$

$4\overline{)22}$

$4\overline{)23}$

$4\overline{)24}$

$4\overline{)25}$

② $6\overline{)21}$

$6\overline{)22}$

$6\overline{)23}$

$6\overline{)24}$

$6\overline{)25}$

Use any method to solve.

③ $8\overline{)6,726}$

④ $7\overline{)9,259}$

⑤ $3\overline{)1,504}$

⑥ $2\overline{)8,037}$

⑦ $9\overline{)3,385}$

⑧ $5\overline{)2,347}$

⑨ $6\overline{)9,003}$

⑩ $4\overline{)8,360}$

Solve.

- ⑪ Altogether, the members of an exercise club drink 840 bottles of water each month. Each member drinks 8 bottles. How many members are there?
- _____

- ⑫ 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?
- _____

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.

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?

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.

$$4 \quad 27 \times 59 \underline{\hspace{2cm}}$$

$$5 \quad 36 \times 92 \underline{\hspace{2cm}}$$

Solve using any method.

$$6 \quad 9 \overline{)271}$$

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

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

- 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.

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?

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.

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?

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.

$$4 \quad 5 \times 6,294 \quad \underline{\hspace{2cm}}$$

$$5 \quad 8 \times 1,375 \quad \underline{\hspace{2cm}}$$

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.

3-11
Homework

Name _____

Date _____

Divide.

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?
- _____

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.
