

Lesson 1 Division (5-digit)

Study how to divide 24 567 by 12.

$\begin{array}{r l l l} \times & 1000 & 2000 & 3000 \\ \hline 12 & 12\ 000 & 24\ 000 & 36\ 000 \end{array}$	$\begin{array}{r l l} \times & 100 & 200 \\ \hline 12 & 1200 & 2400 \end{array}$	$\begin{array}{r l l l} \times & 30 & 40 & 50 \\ \hline 12 & 360 & 480 & 600 \end{array}$	$\begin{array}{r l l l} \times & 6 & 7 & 8 \\ \hline 12 & 72 & 84 & 96 \end{array}$
<p>24 567</p> <p>The thousands digit is 2.</p> $\begin{array}{r} 2 \\ 12 \overline{) 24\ 567} \\ \underline{24\ 000} \\ 567 \end{array}$	<p>567 ÷ 12 is less than 100. The hundreds digit is 0.</p> $\begin{array}{r} 20 \\ 12 \overline{) 24\ 567} \\ \underline{24\ 000} \\ 567 \end{array}$	<p>567</p> <p>The tens digit is 4.</p> $\begin{array}{r} 204 \\ 12 \overline{) 24\ 567} \\ \underline{24\ 000} \\ 567 \\ \underline{480} \\ 87 \end{array}$	<p>87</p> <p>The ones digit is 7.</p> $\begin{array}{r} 2047\ r3 \\ 12 \overline{) 24\ 567} \\ \underline{24\ 000} \\ 567 \\ \underline{480} \\ 87 \\ \underline{84} \\ 3 \end{array}$

CHAPTER 5

Divide.

- | | | | |
|---|--|--|--|
| <p><i>a</i></p> <p>1. $36 \overline{) 4500}$</p> | <p><i>b</i></p> <p>$26 \overline{) 8430}$</p> | <p><i>c</i></p> <p>$92 \overline{) 7911}$</p> | <p><i>d</i></p> <p>$25 \overline{) 3575}$</p> |
| <p>2. $24 \overline{) 77184}$</p> | <p>$92 \overline{) 39754}$</p> | <p>$56 \overline{) 69104}$</p> | <p>$23 \overline{) 17342}$</p> |

Lesson 1 Problem Solving

Solve each problem.

1. In 27 days, 6939 orders were filled. The same number of orders was filled each day. How many orders were filled each day? **1.**

_____ orders were filled each day.

2. Yesterday 5650 school children came in buses to visit the museum. How many full bus loads of students were there if 75 students make up a full load? How many students were on the partially filled bus? **2.**

There were _____ full bus loads.

_____ students were on the partially filled bus.

3. The inventory slip shows that there are 7840 pairs of socks in the warehouse. There are 32 pairs in each box. How many boxes of socks should there be in the warehouse? **3.**

There should be _____ boxes of socks.

4. A factory produced 7605 zimbits yesterday. The zimbits are packed 24 to a box. How many full boxes of zimbits were produced? How many zimbits were left? **4.**

There were _____ full boxes.

_____ zimbits were left.

5. The stadium is separated into 16 sections. Each section has the same number of seats. There are 8640 seats in all. How many seats are in each section? **5.**

There are _____ seats in each section.

6. Suppose there were 9600 seats in the stadium in problem 5. How many seats would be in each section? **6.**

There would be _____ seats in each section.

Lesson 2 Division (5-digit)

Study how to divide 24 205 by 75.

×	100	200	300	400
75	7500	15 000	22 500	30 000

24 205

The hundreds digit is 3.

$$\begin{array}{r} 3 \\ 75 \overline{) 24\,205} \\ \underline{22\,500} \\ 1\,705 \end{array}$$

×	10	20	30	40
75	750	1500	2250	3000

1705

The tens digit is 2.

$$\begin{array}{r} 32 \\ 75 \overline{) 24\,205} \\ \underline{22\,500} \\ 1\,705 \\ \underline{1\,500} \\ 205 \end{array}$$

×	1	2	3	4
75	75	150	225	300

205

The ones digit is 2.

$$\begin{array}{r} 322 \text{ r}55 \\ 75 \overline{) 24\,205} \\ \underline{22\,500} \\ 1\,705 \\ \underline{1\,500} \\ 205 \\ \underline{150} \\ 55 \end{array}$$

Divide.

a

1. $43 \overline{) 17\,716}$

b

$64 \overline{) 32\,768}$

c

$27 \overline{) 22\,005}$

d

$28 \overline{) 60\,088}$

2. $33 \overline{) 27\,313}$

$31 \overline{) 96\,843}$

$43 \overline{) 89\,800}$

$59 \overline{) 41\,645}$

Lesson 2 Problem Solving

Solve each problem.

1. A bus can carry 86 passengers. How many such buses would be needed to carry 20 898 passengers? **1.**

_____ buses would be needed.

2. There are 16 oranges in one bag. How many bags are there if there are 39 238 oranges? How many oranges are left? **2.**

There are _____ bags.

There are _____ oranges left.

3. There are 31 500 kg of salt to be put into bags with 36 kg in each bag. How many full bags of salt would there be? How many kilograms would be left? **3.**

There would be _____ full bags.

_____ kg would be left.

4. It takes 72 h for one machine to produce 14 616 parts. The machine produces the same number of parts each hour. How many parts does it produce each hour? **4.**

It produces _____ parts each hour.

5. Suppose the machine in problem 4 could produce the parts in 36 h. How many parts would it produce each hour? **5.**

It would produce _____ parts each hour.

6. Suppose the machine in problem 4 could produce the parts in 18 h. How many parts would it produce each hour? **6.**

It would produce _____ parts each hour.

7. Suppose the machine in problem 4 could produce the parts in 12 h. How many parts would it produce each hour? **7.**

It would produce _____ parts each hour.

Lesson 3 Checking Division

$$\begin{array}{r}
 2\ 543\ r8 \\
 16 \overline{) 40\ 696} \\
 \underline{32\ 000} \\
 8\ 696 \\
 \underline{8\ 000} \\
 696 \\
 \underline{640} \\
 56 \\
 \underline{48} \\
 8
 \end{array}$$

These should be the same.

Check

$$\begin{array}{r}
 2\ 543 \\
 \times 16 \\
 \hline
 15\ 258 \\
 25\ 430 \\
 \hline
 40\ 688 \\
 +8 \\
 \hline
 40\ 696
 \end{array}$$

To check $40\ 696 \div 16 = 2543\ r8$, multiply

2543 by _____ and then add _____ to this product. The answer should be _____.

Divide. Check each answer.

a

1. $47 \overline{) 99\ 932}$

b

$54 \overline{) 33\ 100}$

2. $38 \overline{) 27\ 590}$

$46 \overline{) 38\ 277}$

3. $75 \overline{) 95\ 100}$

$24 \overline{) 30\ 900}$

Lesson 3 Problem Solving

Solve each problem. Check each answer.

1. There are 35 gates into the stadium and 15 330 people attended the game. The same number entered through each gate. How many entered through each gate? **1.**

_____ people entered through each gate.

2. A garage used 16 434 L of oil in 83 days. The same amount of oil was used each day. How much oil was used each day? **2.**

_____ L were used each day.

3. During 6 months, 77 employees worked 67 639 h. Suppose each employee worked the same number of hours. How many hours did each work? How many hours would be left? **3.**

Each employee worked _____ h.

_____ h are left.

4. Ninety-five containers of the same size were filled with a total of 82 840 kg of coal. How many kilograms of coal were in each container? **4.**

_____ kg were in each container.

5. There are 46 963 students attending 52 schools in the city. Suppose the same number attend each school. How many students would attend each school? How many would be left? **5.**

_____ students would attend each school.

_____ students would be left.

6. Suppose there were twice as many students in problem 5. How many students would attend each school? How many would be left? **6.**

_____ students would attend each school.

_____ students would be left.

Lesson 4 Division (4- and 5-digit)

Divide.

$$1. \quad \begin{array}{r} a \\ 38 \overline{) 72} \end{array}$$

$$\begin{array}{r} b \\ 23 \overline{) 601} \end{array}$$

$$\begin{array}{r} c \\ 32 \overline{) 4640} \end{array}$$

$$\begin{array}{r} d \\ 34 \overline{) 43877} \end{array}$$

$$2. \quad \begin{array}{r} 24 \overline{) 54} \end{array}$$

$$\begin{array}{r} 24 \overline{) 540} \end{array}$$

$$\begin{array}{r} 24 \overline{) 5400} \end{array}$$

$$\begin{array}{r} 24 \overline{) 54000} \end{array}$$

$$3. \quad \begin{array}{r} 12 \overline{) 87} \end{array}$$

$$\begin{array}{r} 21 \overline{) 168} \end{array}$$

$$\begin{array}{r} 42 \overline{) 1491} \end{array}$$

$$\begin{array}{r} 38 \overline{) 21584} \end{array}$$

$$4. \quad \begin{array}{r} 87 \overline{) 95} \end{array}$$

$$\begin{array}{r} 24 \overline{) 369} \end{array}$$

$$\begin{array}{r} 75 \overline{) 6005} \end{array}$$

$$\begin{array}{r} 45 \overline{) 30605} \end{array}$$

Lesson 4 Problem Solving

Solve each problem.

1. Hannah is to read 228 pages in four sessions. She will read the same number of pages each session. How many pages will she read each session? **1.**

She will read _____ pages each session.

2. The square of a number is found by multiplying the number by itself. Matthew said that 2916 is the square of 54. Is he right? **2.**

Matthew _____ right.

3. The astronauts are now 8640 min into their flight. How many hours is this? How many days? **3.**

It is _____ h.

It is _____ days.

4. In 5 hours 15 190 cans came off the assembly line. There are 88 cans packed in each carton. How many full cartons are there? How many cans are in the partially filled carton? **4.**

There are _____ full cartons.

There are _____ cans in the partial carton.

5. A satellite has just completed its 94th orbit. It has been in orbit for 8460 min. How long does it take to make a complete orbit? **5.**

It takes _____ min to make one orbit.

6. How long will the satellite in problem 5 have been in orbit after it has completed its 100th orbit? **6.**

It will have been in orbit _____ h.

CHAPTER 5 PRACTICE TEST
Division (4- and 5-digit by 2-digit)

Divide.

$$1. \quad \overset{a}{97} \overline{) 873}$$

$$\overset{b}{56} \overline{) 952}$$

$$\overset{c}{70} \overline{) 2870}$$

$$\overset{d}{63} \overline{) 6615}$$

$$2. \quad 31 \overline{) 8308}$$

$$41 \overline{) 5043}$$

$$11 \overline{) 1232}$$

$$77 \overline{) 9831}$$

$$3. \quad 32 \overline{) 23744}$$

$$93 \overline{) 31657}$$

$$51 \overline{) 21483}$$

$$43 \overline{) 31605}$$

$$4. \quad 25 \overline{) 23375}$$

$$17 \overline{) 34096}$$

$$37 \overline{) 65510}$$

$$77 \overline{) 92324}$$

$$5. \quad 35 \overline{) 35035}$$

$$25 \overline{) 10025}$$

$$31 \overline{) 93006}$$

$$13 \overline{) 10413}$$

CHAPTER 6 PRETEST

Money

In each dollar amount, circle the digit in the given place value.

*a**b*

1. \$345.06; hundredths place \$705.98; tenths place
 2. \$4587.91; tens place \$135.74; hundreds place

Express each dollar amount in standard form.

3. eighty-three dollars and seventy-five cents _____
 4. seven hundred sixty-three dollars and forty-nine cents _____

CHAPTER 6
 Add.

- | | <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> | <i>e</i> |
|----|------------------------|--------------------------|---------------------------|----------------------------|------------------------------|
| 5. | \$2.94
<u>+6.18</u> | \$32.05
<u>+18.76</u> | \$267.31
<u>+46.98</u> | \$319.46
<u>+229.35</u> | \$4864.11
<u>+2417.39</u> |

Subtract.

- | | | | | | |
|----|------------------------|--------------------------|---------------------------|----------------------------|------------------------------|
| 6. | \$9.41
<u>-3.18</u> | \$33.29
<u>-28.47</u> | \$705.92
<u>-56.35</u> | \$468.13
<u>-125.26</u> | \$5671.48
<u>-3489.17</u> |
|----|------------------------|--------------------------|---------------------------|----------------------------|------------------------------|

Multiply.

- | | | | | | |
|----|---------------------|---------------------|----------------------|----------------------|-----------------------|
| 7. | \$1.38
<u>×4</u> | \$8.63
<u>×7</u> | \$37.81
<u>×5</u> | \$5.49
<u>×21</u> | \$55.19
<u>×38</u> |
|----|---------------------|---------------------|----------------------|----------------------|-----------------------|

Divide.

- | | | | | | |
|----|------------------------|------------------------|-------------------------|-------------------------|--------------------------|
| 8. | $3\overline{) \$0.87}$ | $8\overline{) \$9.84}$ | $6\overline{) \$34.56}$ | $14\overline{) \$7.56}$ | $47\overline{) \$99.64}$ |
|----|------------------------|------------------------|-------------------------|-------------------------|--------------------------|