

## Lesson 1 Division Facts

$$\begin{array}{r} 9 \text{-----} \rightarrow 9 \\ \times 5 \text{-----} \rightarrow 5 \overline{)45} \\ 45 \text{-----} \uparrow \end{array}$$

$$\begin{array}{r} 9 \text{-----} \rightarrow 5 \\ \times 5 \text{-----} \rightarrow 9 \overline{)45} \\ 45 \text{-----} \uparrow \end{array}$$

If  $5 \times 9 = 45$ , then  $45 \div 5 = 9$  and  $45 \div 9 = 5$ .

Divide.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>
1.	$2 \overline{)6}$	$3 \overline{)9}$	$2 \overline{)4}$	$2 \overline{)8}$	$3 \overline{)6}$	$4 \overline{)8}$
2.	$1 \overline{)5}$	$3 \overline{)3}$	$6 \overline{)0}$	$1 \overline{)9}$	$2 \overline{)2}$	$7 \overline{)7}$
3.	$4 \overline{)28}$	$6 \overline{)42}$	$3 \overline{)18}$	$6 \overline{)36}$	$8 \overline{)32}$	$2 \overline{)14}$
4.	$2 \overline{)10}$	$8 \overline{)72}$	$7 \overline{)42}$	$5 \overline{)20}$	$3 \overline{)15}$	$4 \overline{)36}$
5.	$8 \overline{)24}$	$2 \overline{)18}$	$1 \overline{)8}$	$4 \overline{)32}$	$5 \overline{)25}$	$9 \overline{)81}$
6.	$7 \overline{)35}$	$9 \overline{)27}$	$6 \overline{)24}$	$7 \overline{)49}$	$8 \overline{)48}$	$9 \overline{)36}$
7.	$5 \overline{)40}$	$3 \overline{)24}$	$2 \overline{)16}$	$6 \overline{)48}$	$7 \overline{)28}$	$9 \overline{)54}$
8.	$5 \overline{)15}$	$4 \overline{)12}$	$2 \overline{)12}$	$3 \overline{)0}$	$6 \overline{)54}$	$3 \overline{)27}$
9.	$4 \overline{)20}$	$8 \overline{)56}$	$6 \overline{)30}$	$4 \overline{)24}$	$3 \overline{)21}$	$5 \overline{)30}$
10.	$8 \overline{)16}$	$5 \overline{)35}$	$4 \overline{)16}$	$8 \overline{)64}$	$9 \overline{)63}$	$8 \overline{)40}$

## Lesson 1 Problem Solving

Solve each problem.

- |   |                  |
|---|------------------|
| <p><b>1.</b> There are 18 chairs and 6 tables in the room. There are the same number of chairs at each table. How many chairs are at each table?</p> <p>There are _____ chairs.</p> <p>There are _____ tables.</p> <p>There are _____ chairs at each table.</p> | <p><b>1.</b></p> |
| <p><b>2.</b> Each box takes 3 min to fill. It took 18 min to fill all the boxes. How many boxes are there?</p> <p>It took _____ min to fill all the boxes.</p> <p>It takes _____ min to fill one box.</p> <p>There are _____ boxes.</p>                         | <p><b>2.</b></p> |
| <p><b>3.</b> Rob, Joe, Jay, Tom, Alex, and Jim share six sandwiches. How many sandwiches does each boy get?</p> <p>There are _____ sandwiches in all.</p> <p>The sandwiches are shared among _____ boys.</p> <p>Each boy gets _____ sandwich.</p>               | <p><b>3.</b></p> |
| <p><b>4.</b> Bill and eight friends each sold the same number of tickets. They sold 72 tickets in all. How many tickets were sold by each person?</p> <p>Each person sold _____ tickets.</p>  | <p><b>4.</b></p> |
| <p><b>5.</b> Forty-eight oranges are in a crate. The oranges are to be put into bags of six each. How many bags can be filled?</p> <p>_____ bags can be filled.</p>   | <p><b>5.</b></p> |
| <p><b>6.</b> Adam has a wire that is 42 cm long. He cuts the wire into 7-cm lengths. How many pieces of wire will he have?</p> <p>He will have _____ pieces of wire.</p>  | <p><b>6.</b></p> |

# Lesson 2 Division (by 1-digit)

Study how to divide 738 by 3.

×	100	200	300
3	300	600	900

738 is between 600 and 900, so  $738 \div 3$  is between 200 and 300. The hundreds digit is 2.

$$\begin{array}{r} 2 \\ 3 \overline{) 738} \\ \underline{600} \quad (200 \times 3) \\ 138 \quad \text{Subtract.} \end{array}$$

×	10	20	30	40	50
3	30	60	90	120	150

138 is between 120 and 150, so  $138 \div 3$  is between 40 and 50. The tens digit is 4.

$$\begin{array}{r} 24 \\ 3 \overline{) 738} \\ \underline{600} \\ 138 \\ \underline{120} \quad (40 \times 3) \\ 18 \quad \text{Subtract.} \end{array}$$

×	1	2	3	4	5	6
3	3	6	9	12	15	18

$18 \div 3 = 6$ , so the ones digit is 6.

$$\begin{array}{r} 246 \\ 3 \overline{) 738} \\ \underline{600} \\ 138 \\ \underline{120} \\ 18 \\ \underline{18} \quad (6 \times 3) \\ 0 \quad \text{Subtract.} \end{array}$$

remainder (r) ---> 0

Divide.

1.  $a$   
 $8 \overline{) 96}$

$b$   
 $4 \overline{) 72}$

$c$   
 $6 \overline{) 72}$

$d$   
 $3 \overline{) 81}$

$e$   
 $4 \overline{) 68}$

2.  $2 \overline{) 74}$

$3 \overline{) 87}$

$5 \overline{) 75}$

$7 \overline{) 784}$

$3 \overline{) 768}$

3.  $8 \overline{) 296}$

$9 \overline{) 315}$

$6 \overline{) 252}$

$6 \overline{) 462}$

$5 \overline{) 930}$

## Lesson 2 Problem Solving

Solve each problem.

1. There are 84 scouts in all. Six will be assigned to each tent. How many tents are there?

There are \_\_\_\_\_ scouts in all.

There are \_\_\_\_\_ scouts in each tent.

There are \_\_\_\_\_ tents.

2. Seven people each worked the same number of hours. They worked 91 h in all. How many hours were worked by each person?

\_\_\_\_\_ h were worked.

\_\_\_\_\_ people worked these hours.

\_\_\_\_\_ h were worked by each person.

3. A group of three is a trio. How many trios could be formed with 72 people?

\_\_\_\_\_ trios could be formed.

4. A factory shipped 848 cars to four cities. Each city received the same number of cars. How many cars were shipped to each city?

\_\_\_\_\_ cars were shipped.

\_\_\_\_\_ cities received the cars.

\_\_\_\_\_ cars were shipped to each city.

5. Malcolm, his brother, and his sister have 702 stamps in all. Suppose each takes the same number of stamps. How many will each get?

Each will get \_\_\_\_\_ stamps.

6. There are six outs in an inning of baseball. How many innings would have to be played to get 348 outs?

\_\_\_\_\_ innings would have to be played.

1.

2.

3.

4.

5.

6.

# Lesson 3 Division with Remainders

Study how to divide 854 by 4.

×	100	200	300
4	400	800	1200

854

854 ÷ 4 is between 200 and 300. The hundreds digit is 2.

$$\begin{array}{r} 2 \\ 4 \overline{) 854} \\ \underline{800} \quad (200 \times 4) \\ 54 \quad \text{Subtract.} \end{array}$$

×	10	20	30	40
4	40	80	120	160

54

54 ÷ 4 is between 10 and 20. The tens digit is 1.

$$\begin{array}{r} 21 \\ 4 \overline{) 854} \\ \underline{800} \\ 54 \\ \underline{40} \quad (10 \times 4) \\ 14 \quad \text{Subtract.} \end{array}$$

×	1	2	3	4	5
4	4	8	12	16	20

14

14 ÷ 4 is between 3 and 4. The ones digit is 3.

$$\begin{array}{r} 213 \text{ r}2 \\ 4 \overline{) 854} \\ \underline{800} \\ 54 \\ \underline{40} \\ 14 \\ \underline{12} \quad (3 \times 4) \\ 2 \quad \text{Subtract.} \end{array}$$

Divide.

1.  $a$   $3 \overline{) 82}$

$b$   $5 \overline{) 86}$

$c$   $4 \overline{) 97}$

$d$   $3 \overline{) 76}$

$e$   $2 \overline{) 47}$

2.  $7 \overline{) 83}$

$5 \overline{) 69}$

$6 \overline{) 224}$

$4 \overline{) 127}$

$2 \overline{) 380}$

3.  $4 \overline{) 231}$

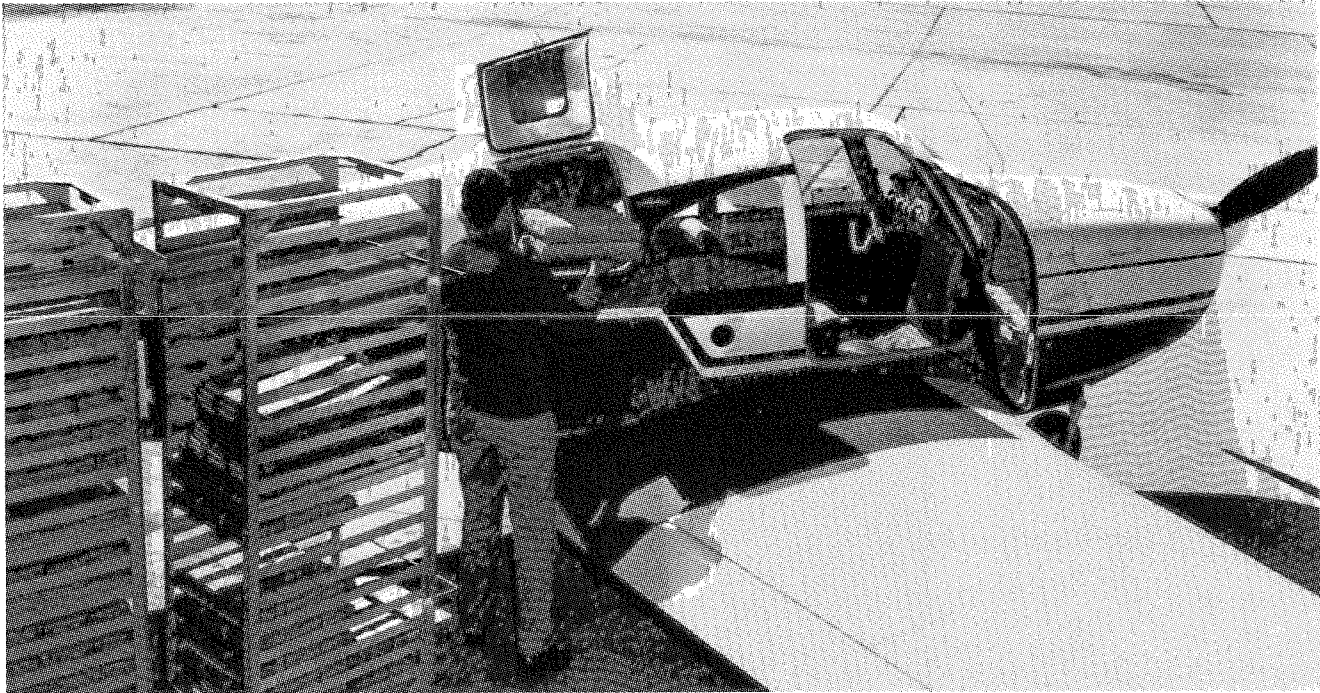
$5 \overline{) 653}$

$7 \overline{) 962}$

$2 \overline{) 483}$

$6 \overline{) 832}$

## Lesson 3 Problem Solving



Solve each problem.

1. There are 160 packages on four large carts. Each cart holds the same number of packages. How many packages are on each cart?

Each cart has \_\_\_\_\_ packages.

2. There are 160 packages. To deliver most of the packages, it will take three small planes. Each plane will take the same number of packages. How many packages will each plane take? How many packages will be left over?

Each plane will take \_\_\_\_\_ packages.

There will be \_\_\_\_\_ package(s) left over.

3. Suppose there had been 890 packages to be delivered by six planes. Each plane is to take the same number of packages and as many as possible. How many packages will each plane take? How many will be left over?

Each plane will take \_\_\_\_\_ packages.

There will be \_\_\_\_\_ packages left over.

# Lesson 4 Checking Division

$$\begin{array}{r}
 235 \\
 8 \overline{) 1880} \\
 \underline{1600} \\
 280 \\
 \underline{240} \\
 40 \\
 \underline{40} \\
 0
 \end{array}$$

These should be the same.

$$\begin{array}{r}
 \textit{Check} \\
 235 \\
 \times 8 \\
 \hline
 1880
 \end{array}$$

$$\begin{array}{r}
 178 \text{ r}2 \\
 3 \overline{) 536} \\
 \underline{300} \\
 236 \\
 \underline{210} \\
 26 \\
 \underline{24} \\
 2
 \end{array}$$

These should be the same.

$$\begin{array}{r}
 \textit{Check} \\
 178 \\
 \times 3 \\
 \hline
 534 \\
 + 2 \\
 \hline
 536
 \end{array}$$

To check  $1880 \div 8 = 235$ ,  
multiply 235 by 8. The answer should be \_\_\_\_\_.

To check  $536 \div 3 = 178 \text{ r}2$ ,  
multiply 178 by 3 and then add 2. The answer should be \_\_\_\_\_.

Divide. Check each answer.

*a*

1.  $4 \overline{) 1104}$

*b*

$8 \overline{) 1760}$

*c*

$2 \overline{) 4632}$

2.  $3 \overline{) 379}$

$5 \overline{) 421}$

$4 \overline{) 762}$

3.  $3 \overline{) 1058}$

$6 \overline{) 726}$

$7 \overline{) 2117}$

## Lesson 4 Problem Solving

Solve each problem. Check each answer.

1. How many bags of seven oranges each can be filled from a shipment of 341 oranges? How many oranges will be left? **1.**

\_\_\_\_\_ bags can be filled.

\_\_\_\_\_ oranges will be left.

2. Beverly has \$2.38 (238¢) to buy pencils for 8¢ each. How many pencils can she buy? How many cents will she have left? **2.**

She can buy \_\_\_\_\_ pencils.

She will have \_\_\_\_\_ ¢ left.

3. There are six stamps in each row. How many complete rows can be filled with 1950 stamps? How many stamps will be left? **3.**

\_\_\_\_\_ rows will be filled.

\_\_\_\_\_ stamps will be left.

4. Daphne had 958 pennies. She exchanged them for nickels. How many nickels did she get? How many pennies did she have left? **4.**

She got \_\_\_\_\_ nickels.

She had \_\_\_\_\_ pennies left.

5. Last year Mr. Gomez worked 1983 h. How many 8-h days was this? How many hours are left? **5.**

It was \_\_\_\_\_ 8-h days.

\_\_\_\_\_ h are left.

6. There are 7633 points to be divided among Paul, Jeremy, and Paige. Each receives the same number of points. How many points will each receive? How many points will be left? **6.**

Each student will receive \_\_\_\_\_ points.

\_\_\_\_\_ point(s) will be left.



## Lesson 5 Estimating Quotients

To estimate a quotient, think of a familiar division fact.

$$\begin{array}{r} 5 \overline{)18} \\ \underline{20} \\ 20 \\ \underline{20} \\ 0 \end{array} \text{ Subtract}$$

Think of what you can round the dividend (18) to so that it is easy to divide mentally by the divisor (5). The quotient is 4.

$$\begin{array}{r} 7 \overline{)342} \\ \underline{50} \\ 350 \\ \underline{350} \\ 0 \end{array} \text{ Subtract}$$

Think of what you can round the dividend (342) to so that it is easy to divide mentally by the divisor (7). The quotient is 50.

Estimate each quotient.

*a*

1.  $4 \overline{)25}$

*b*

$8 \overline{)46}$

*c*

$3 \overline{)16}$

*d*

$9 \overline{)48}$

2.  $3 \overline{)175}$

$5 \overline{)319}$

$7 \overline{)236}$

$6 \overline{)474}$

3.  $6 \overline{)381}$

$4 \overline{)316}$

$8 \overline{)652}$

$9 \overline{)651}$

4.  $2 \overline{)1783}$

$6 \overline{)2572}$

$5 \overline{)4392}$

$4 \overline{)4952}$

## Lesson 5 Problem Solving

Solve each problem. Use estimation.

1. Brandon bought cookies to pack in his lunch. He bought a box with 28 cookies. If he packs five cookies in his lunch each day, about how many days will the cookies last?

The cookies will last for about \_\_\_\_\_ days.

2. Marta babysat for 4 h and earned \$19. About how much money did Marta earn each hour that she babysat?

Marta earned about \_\_\_\_\_ each hour that she babysat.

3. Bethany rode her bike three days one week. She rode a total of 31 km. If she rode the same distance each day, about how many kilometres did she ride each day that week?

Bethany rode her bike about \_\_\_\_\_ km each day that week.

4. Over a 4-week period, Terrell earns \$354 at his part-time job. About how much money does Terrell earn each week at his part-time job?

Terrell earns about \_\_\_\_\_ each week at his part-time job.

5. The school play was performed five times. For the five performances, there was a total of 962 people in attendance. About how many people were in attendance each time the play was performed?

There were about \_\_\_\_\_ people in attendance each time the play was performed.

6. An auditorium holds 1438 people. There are three different sections of seating. Each section has the same number of seats. About how many seats are in each section of the auditorium?

There are about \_\_\_\_\_ seats in each section.

1.

2.

3.

4.

5.

6.

# CHAPTER 3 PRACTICE TEST

## Division (2-digit through 4-digit by 1-digit)

Divide.

	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1.	$4 \overline{)96}$	$7 \overline{)84}$	$3 \overline{)79}$	$5 \overline{)68}$

2.	$4 \overline{)732}$	$5 \overline{)175}$	$7 \overline{)615}$	$2 \overline{)647}$
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3.	$8 \overline{)1720}$	$4 \overline{)5216}$	$4 \overline{)1530}$	$3 \overline{)6323}$
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4.	$3 \overline{)84}$	$6 \overline{)76}$	$8 \overline{)94}$	$2 \overline{)78}$
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5.	$4 \overline{)1256}$	$3 \overline{)6343}$	$5 \overline{)1842}$	$6 \overline{)7206}$
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**CHAPTER 4 PRETEST****Division (2-digit through 4-digit by 2-digit)**

Divide.

*a*

1.  $13 \overline{) 78}$

*b*

$14 \overline{) 98}$

*c*

$12 \overline{) 65}$

*d*

$15 \overline{) 95}$

2.  $24 \overline{) 312}$

$37 \overline{) 962}$

$12 \overline{) 586}$

$23 \overline{) 550}$

3.  $27 \overline{) 3564}$

$74 \overline{) 7252}$

$36 \overline{) 2026}$

$34 \overline{) 3830}$

4.  $16 \overline{) 768}$

$52 \overline{) 2724}$

$18 \overline{) 310}$

$14 \overline{) 56}$

5.  $34 \overline{) 4284}$

$53 \overline{) 2120}$

$26 \overline{) 964}$

$11 \overline{) 418}$