

Lesson 1 Division (2-digit)

Study how to divide 32 by 6.

×	1	2	3	4	5	6
6	6	12	18	24	30	36

32 is between 30 and 36, so $32 \div 6$ is between 5 and 6. The ones digit is 5.

$$\begin{array}{r} 5 \\ 6 \overline{) 32} \\ \underline{30} \\ 2 \end{array} \quad \begin{array}{l} 5 \times 6 \\ \text{Subtract.} \end{array}$$

Since $32 - 30 = 2$ and 2 is less than 6, the **remainder 2** is recorded like this:

$$\begin{array}{r} 5 \text{ r}2 \\ 6 \overline{) 32} \\ \underline{30} \\ 2 \end{array}$$

Study how to divide 43 by 9.

×	1	2	3	4	5	6
9	9	18	27	36	45	54

43 is between 36 and 45, so $43 \div 9$ is between 4 and 5. The ones digit is 4.

$$\begin{array}{r} 4 \\ 9 \overline{) 43} \\ \underline{36} \\ 7 \end{array} \quad \begin{array}{l} 4 \times 9 \\ \text{Subtract.} \end{array}$$

Since $43 - 36 = 7$ and 7 is less than 9, the **remainder is 7**.

$$\begin{array}{r} 4 \\ 9 \overline{) 43} \\ \underline{36} \\ 7 \end{array}$$

Divide.

a

b

c

d

e

1. $5 \overline{) 27}$

$8 \overline{) 47}$

$2 \overline{) 17}$

$9 \overline{) 46}$

$6 \overline{) 38}$

2. $7 \overline{) 61}$

$9 \overline{) 67}$

$5 \overline{) 49}$

$3 \overline{) 23}$

$8 \overline{) 78}$

3. $4 \overline{) 38}$

$6 \overline{) 45}$

$8 \overline{) 63}$

$2 \overline{) 19}$

$7 \overline{) 38}$

Lesson 1 Problem Solving

Solve each problem.

- 1.** How many pieces of rope 4 m long can be cut from 15 m of rope? How much rope will be left over?

_____ pieces can be cut.

_____ m will be left over.

- 2.** Dale has 51¢. Magic rings cost 8¢ each. How many magic rings can he buy? How much money will he have left?

Dale can buy _____ magic rings.

He will have _____ ¢ left.

- 3.** Maria has a board that is 68 cm long. How many 9-cm pieces can be cut from this board? How long is the piece that is left?

_____ pieces can be cut.

_____ cm will be left.

- 4.** 28 L of water was used to fill buckets that hold 5 L each. How many buckets were filled? How much water was left over?

_____ buckets were filled.

_____ L of water were left over.

- 5.** It takes 8 min to make a doodad. How many doodads can be made in 60 min? How much time would be left to begin making another doodad?

_____ doodads can be made.

_____ min would be left.

Lesson 2 Division (2-digit)

Study how to divide 72 by 3.

×	10	20	30	40
3	30	60	90	120

72 is between 60 and 90, so
 $72 \div 3$ is between 20 and 30.
 The tens digit is 2.

$$\begin{array}{r}
 2 \\
 3 \overline{) 72} \\
 \underline{60} \quad 20 \times 3 \\
 12 \quad \text{Subtract.}
 \end{array}$$

×	1	2	3	4	5
3	3	6	9	12	15

$4 \times 3 = 12$, so the ones
 digit is 4.

$$\begin{array}{r}
 24 \\
 3 \overline{) 72} \\
 \underline{60} \\
 12 \\
 \underline{12} \quad 4 \times 3 \\
 0 \quad \text{Subtract.}
 \end{array}$$

Divide.

a

b

c

d

e

1. $2 \overline{) 26}$

$4 \overline{) 48}$

$5 \overline{) 55}$

$3 \overline{) 96}$

$4 \overline{) 88}$

2. $4 \overline{) 47}$

$6 \overline{) 69}$

$3 \overline{) 65}$

$7 \overline{) 96}$

$8 \overline{) 99}$

3. $7 \overline{) 91}$

$9 \overline{) 96}$

$3 \overline{) 87}$

$8 \overline{) 97}$

$4 \overline{) 92}$

Lesson 2 Problem Solving

Solve each problem.

1. Ninety-nine students are to be separated into nine groups. The same number of students is to be in each group. How many students will be in each group?

_____ students will be in each group.

2. There are 94 grapefruit in a crate. How many bags of six grapefruit each can be filled by using the grapefruit from one crate? How many grapefruit will be left over?

_____ bags can be filled.

_____ grapefruit will be left over.

3. Ms. McClean has 60 golf balls in tins of three. How many tins of golf balls does she have?

She has _____ tins of golf balls.

4. There are 96 jelly beans in a bowl. How many people can take seven jelly beans each? How many jelly beans will be left over?

_____ people can take seven jelly beans.

_____ jelly beans will be left over.

5. Toy cars are packed into boxes of eight cars each. How many boxes will be needed to pack 96 toy cars?

_____ boxes will be needed.

6. You have 64 pennies to exchange for nickels. How many nickels will you get? How many pennies will be left?

You will get _____ nickels.

_____ pennies will be left.

1.

2.

3.

4.

5.

6.

Lesson 3 Division (2-digit)

Divide.

*a**b**c**d**e*

1. $3 \overline{) 23}$

$5 \overline{) 46}$

$7 \overline{) 67}$

$9 \overline{) 85}$

$8 \overline{) 69}$

2. $2 \overline{) 28}$

$3 \overline{) 36}$

$4 \overline{) 44}$

$3 \overline{) 93}$

$4 \overline{) 84}$

3. $5 \overline{) 85}$

$6 \overline{) 96}$

$8 \overline{) 96}$

$7 \overline{) 98}$

$9 \overline{) 90}$

4. $7 \overline{) 74}$

$5 \overline{) 57}$

$8 \overline{) 99}$

$2 \overline{) 85}$

$3 \overline{) 65}$

5. $3 \overline{) 79}$

$5 \overline{) 67}$

$6 \overline{) 97}$

$4 \overline{) 94}$

$7 \overline{) 89}$

Lesson 3 Problem Solving

Solve each problem.

1. Paul has 75 stamps. His album will hold nine stamps per page. How many pages can he fill? How many stamps will be left over?

He can fill _____ pages.

_____ stamps will be left over.

2. Kelsey has 96 stamps. Her album will hold six stamps per page. How many pages can she fill?

She can fill _____ pages.

3. Seventy-seven stamps are given to a stamp club. Each of the seven members is to receive the same number of stamps. How many stamps will each member get?

Each of the members will get _____ stamps.

4. Anne has 87¢. What is the greatest number of nickels she could have? What is the least number of pennies she could have?

She could have at most _____ nickels.

She could have as few as _____ pennies.

5. Fifty-four students are to be separated into teams of nine students each. How many teams can be formed?

_____ teams can be formed.

6. Rex has 63 empty bottles. He wants to put them into cartons of eight bottles each. How many cartons can he fill? How many bottles will be left over?

_____ cartons can be filled.

_____ bottles will be left over.

1.

2.

3.

4.

5.

6.

Lesson 4 Division (3-digit)

Study how to divide 263 by 5.

Since $100 \times 5 = 500$ and 500 is greater than 263, there is no hundreds digit.

$$\begin{array}{r} 5 \overline{) 263} \end{array}$$

\times	10	20	30	40	50	60
5	50	100	150	200	250	300

263 is between 250 and 300.
 $263 \div 5$ is between 50 and 60.
 The tens digit is 5.

$$\begin{array}{r} 5 \\ 5 \overline{) 263} \\ \underline{250} \quad 50 \times 5 \\ 13 \quad \text{Subtract.} \end{array}$$

\times	1	2	3	4	5
5	5	10	15	20	25

13 is between 10 and 15.
 $13 \div 5$ is between 2 and 3.
 The ones digit is 2.

$$\begin{array}{r} 52 \text{ r}3 \\ 5 \overline{) 263} \\ \underline{250} \\ 13 \\ \underline{10} \quad 2 \times 5 \\ 3 \quad \text{Subtract.} \end{array}$$

Divide.

a

$$1. \quad 4 \overline{) 248}$$

b

$$6 \overline{) 366}$$

c

$$3 \overline{) 189}$$

d

$$7 \overline{) 266}$$

e

$$8 \overline{) 472}$$

2. $9 \overline{) 547}$

$2 \overline{) 121}$

$5 \overline{) 308}$

$6 \overline{) 374}$

$4 \overline{) 341}$

3. $8 \overline{) 735}$

$3 \overline{) 252}$

$9 \overline{) 479}$

$7 \overline{) 378}$

$5 \overline{) 473}$

Lesson 4 Problem Solving



Solve each problem.

1. A truck driver drove from Edmonton to Calgary in 3 h. The same distance was driven each hour. How many kilometres were driven each hour?

_____ km were driven each hour.

2. A bus left Ottawa and arrived in Toronto 5 h later. The bus went the same distance each hour. How many kilometres were travelled each hour?

_____ km were travelled each hour.

3. Suppose the same distance is driven each hour. How many kilometres must be driven each hour to go from Vancouver to Prince George in 8 h?

_____ km must be driven each hour.

4. The Jetts' plan is to drive from Vancouver to Kelowna in 5 h. Suppose they travel the same distance each hour. How many kilometres must they travel each hour?

_____ km must be driven each hour.

5. Suppose the same distance is travelled each hour. How many kilometres must be travelled each hour to go from Edmonton to Saskatoon in 5 h?

_____ km must be travelled each hour.

1.

2.

3.

4.

5.

Lesson 5 Division (3-digit)

Study how to divide 813 by 4.

×	100	200	300
4	400	800	1200

813 is between 800 and 1200, so $813 \div 4$ is between 200 and 300. The hundreds digit is 2.

$$\begin{array}{r} 2 \\ 4 \overline{) 813} \\ \underline{800} \quad 200 \times 4 \\ 13 \quad \text{Subtract.} \end{array}$$

Since $10 \times 4 = 40$ and 40 is greater than 13, the tens digit is 0.

$$\begin{array}{r} 20 \\ 4 \overline{) 813} \\ \underline{800} \\ 13 \\ \underline{0} \quad 0 \times 4 \\ 13 \quad \text{Subtract.} \end{array}$$

×	1	2	3	4
4	4	8	12	16

13 is between 12 and 16, so $13 \div 4$ is between 3 and 4. The ones digit is 3.

$$\begin{array}{r} 203 \text{ r}1 \\ 4 \overline{) 813} \\ \underline{800} \\ 13 \\ \underline{0} \\ 13 \\ \underline{12} \quad 3 \times 4 \\ 1 \quad \text{Subtract.} \end{array}$$

Divide.

a

1. $2 \overline{) 468}$

b

$4 \overline{) 472}$

c

$3 \overline{) 609}$

d

$5 \overline{) 585}$

e

$7 \overline{) 882}$

2. $8 \overline{) 876}$

$6 \overline{) 794}$

$9 \overline{) 979}$

$2 \overline{) 987}$

$5 \overline{) 593}$

3. $6 \overline{) 842}$

$3 \overline{) 949}$

$7 \overline{) 875}$

$4 \overline{) 879}$

$8 \overline{) 992}$

Lesson 5 Problem Solving

Solve each problem.

1. Mrs. Steel needs 960 trading stamps to fill a book. These stamps will fill eight pages with the same number of stamps on each page. How many stamps are needed to fill each page?

_____ stamps are needed to fill each page.

2. There are 576 pencils in four cases. There are the same number of pencils in each case. How many pencils are in each case?

There are _____ pencils in each case.

3. There are 532 apples in all. How many sacks of five apples each can be filled? How many apples will be left over?

_____ sacks can be filled.

_____ apples will be left over.

4. At a factory, 968 items were manufactured during an 8-h shift. The same number was manufactured each hour. How many items were manufactured each hour?

_____ items were manufactured each hour.

5. The West Side Bridge is 540 m long. It consists of four sections of the same length. How long is each section?

Each section is _____ m long.

6. A full load for a dry cleaning machine is five suits. There are 624 suits to be cleaned. How many full loads will there be? How many suits will be in the partial load?

There will be _____ full loads.

There will be _____ suits in the partial load.

7. A carpenter uses 15 nails to shingle 1 m^2 of roof. At that rate, how many square metres of roof could be shingled by using 750 nails?

_____ m^2 could be shingled.

1.

2.

3.

4.

5.

6.

7.

Lesson 6 Division (3-digit)

Divide.

*a**b**c**d**e*

1. $2 \overline{) 126}$

$6 \overline{) 486}$

$3 \overline{) 249}$

$7 \overline{) 553}$

$8 \overline{) 624}$

2. $5 \overline{) 473}$

$4 \overline{) 357}$

$9 \overline{) 758}$

$6 \overline{) 525}$

$3 \overline{) 269}$

3. $3 \overline{) 693}$

$2 \overline{) 816}$

$4 \overline{) 856}$

$5 \overline{) 925}$

$7 \overline{) 791}$

4. $9 \overline{) 969}$

$6 \overline{) 797}$

$8 \overline{) 953}$

$7 \overline{) 899}$

$5 \overline{) 869}$

Lesson 6 Problem Solving

Solve each problem.

1. A rocket used 945 kg of fuel in 9 s during liftoff. The same amount of fuel was used each second. How many kilograms of fuel were used each second?

_____ kg were used each second.

2. A team for a relay race consists of four members who run the same distance. How far would each member run in an 800-m relay?

Each team member would run _____ m.

3. There are 435 folding chairs in all. How many rows of nine chairs each can be formed? How many chairs will be left over?

_____ rows can be formed.

_____ chairs will be left over.

4. Eight boxes of freight have a mass of 920 kg. Each box holds the same amount of freight. What is the mass of each box?

Each box has a mass of _____ kg.

5. A person's weight on Earth is six times more than on the moon. How much would a person who weighs 800 newtons (N) on Earth weigh on the moon?

The person would weigh _____ N.

6. There are 627 items to be packed. The items are to be packed six to a box. How many boxes can be filled? How many items will be left over?

_____ boxes will be filled.

_____ items will be left over.

7. The mass of four players on a team is 292 kg. Suppose each player has the same mass. What is the mass of each player?

Each player's mass would be _____ kg.

1.

2.

3.

4.

5.

6.

7.

CHAPTER 9 PRACTICE TEST**Division (2- and 3-digit by 1-digit)**

Divide.

*a**b**c**d**e*

1. $4 \overline{) 26}$

$6 \overline{) 39}$

$7 \overline{) 68}$

$8 \overline{) 88}$

$2 \overline{) 86}$

2. $5 \overline{) 90}$

$6 \overline{) 78}$

$3 \overline{) 68}$

$4 \overline{) 87}$

$8 \overline{) 98}$

3. $2 \overline{) 104}$

$6 \overline{) 246}$

$3 \overline{) 219}$

$5 \overline{) 285}$

$8 \overline{) 672}$

4. $4 \overline{) 363}$

$3 \overline{) 278}$

$5 \overline{) 427}$

$9 \overline{) 627}$

$8 \overline{) 465}$

5. $9 \overline{) 981}$

$4 \overline{) 892}$

$7 \overline{) 952}$

$4 \overline{) 843}$

$8 \overline{) 986}$

CHAPTER 10 PRETEST

Division (4-digit by 1-digit)

Divide.

$$1. \quad \begin{array}{r} a \\ 3 \overline{) 249} \end{array}$$

$$\begin{array}{r} b \\ 5 \overline{) 452} \end{array}$$

$$\begin{array}{r} c \\ 8 \overline{) 4893} \end{array}$$

$$\begin{array}{r} d \\ 6 \overline{) 4257} \end{array}$$

$$2. \quad \begin{array}{r} 4 \overline{) 8408} \end{array}$$

$$\begin{array}{r} 9 \overline{) 9081} \end{array}$$

$$\begin{array}{r} 7 \overline{) 9147} \end{array}$$

$$\begin{array}{r} 5 \overline{) 6724} \end{array}$$

$$3. \quad \begin{array}{r} 2 \overline{) 1268} \end{array}$$

$$\begin{array}{r} 4 \overline{) 3282} \end{array}$$

$$\begin{array}{r} 6 \overline{) 2416} \end{array}$$

$$\begin{array}{r} 9 \overline{) 1764} \end{array}$$

$$4. \quad \begin{array}{r} 5 \overline{) 5650} \end{array}$$

$$\begin{array}{r} 3 \overline{) 3692} \end{array}$$

$$\begin{array}{r} 7 \overline{) 8435} \end{array}$$

$$\begin{array}{r} 8 \overline{) 9472} \end{array}$$