Lesson 1   Multiplication and Division

NAME _____

```
 19 ------>  19          507                      13 ---->13          272          272
 ×5 ---> 5) 95           ×8            so 8) 4056  7) 91   ×7 <--   7) 1904   so   ×7
 95 ------^              4056                     70     >91
                                                 21
                                                 21
                                                  0
```

Complete the following.

            a   *b*

1.   117   95   95
         ×5   so 5)585   3) 285   so   ×3
         585

2.   219   203   203
         ×7   so 7) 1533   9) 1827 so   ×9
         1533

Multiply or divide.

        a   *b*   *c*   *d*

3. 2 7   5) 1 3 5   1 2 3   8) 9 8 4
        ×5   ×8

4. 7 2 8   6) 4 3 6 8   4) 8 3 2 4   2 0 8 1
        ×6   ×4

5. 9) 2 2 1 4   2 4 6   3) 5 6 1   1 8 7
                     ×9   ×3

Lesson 1 Problem Solving

Solve each problem.

1. Charles solved 80 problems in 5 days. He solved the same number of problems each day. How many problems did he solve each day?

   He solved _____ problems each day.

2. There are nine rows of tiles on a floor. There are 18 tiles in each row. How many tiles are there on the floor?

   _____ tiles are on the floor.

3. An eight-storey apartment building is 32 m high. Each storey is the same height. What is the height of each storey?

   Each storey is _____ m high.

4. A sheet of plywood has a mass of 21 kg. What would be the mass of eight sheets?

   The mass would be _____ kg.

5. A company made 4325 cars in 5 days. The same number of cars was made each day. How many cars were made each day?

   _____ cars were made each day.

6. The seating capacity of a sports arena is 7560. The seats are arranged in six sections of the same size. How many seats are there in each section?

   _____ seats are in each section.

7. The school library has 8096 books. The same number of books is stored along each of the four walls. How many books are along each wall?

   _____ books are along each wall.

1.	
2.	3.
4.	5.
6.	7.

Lesson 2 Checking Multiplication

These should
be the same. - - - - - - → 321

321 ◄ - '   *Check*   3) 963
×3   900
963   63
                                   60

To check $3 \times 321 = 963$,   3
divide 963 by 3.   3
                                0

These should
be the same. - - - - - - → 1243

1243 ◄ - '   *Check*   4) 4972
×4   4000
4972   972
                                 800

To check $4 \times 1243 = 4972$,   172
                                   160
divide _____ by ____.   12
                                   12
                                   0

Multiply. Check each answer.

	a	*b*	*c*
1.	2 3 1 ×3	6 7 8 ×7	9 7 5 ×8
2.	1 2 3 4 ×2	2 6 7 5 ×9	1 2 5 7 ×6
3.	2 3 0 2 ×4	7 5 8 2 ×5	3 5 4 3 ×7

CHAPTER 11

Lesson 2 Problem Solving

Solve each problem. Check each answer.

1. Each of the four members of a relay team runs 400 m. What is the total distance the team will run?

   The team will run _____ metres.

2. Benjamin delivers 165 papers each day. How many papers does he deliver in a week?

   He delivers _____ papers in a week.

3. There are 125 nails in a 1-kg pack. How many nails will be in a 5-kg pack?

   _____ nails will be in a 5-kg pack.

4. It takes 1200 trading stamps to fill a book. How many stamps will it take to fill six books?

   It will take _____ stamps.

5. A contractor estimated that it would take 2072 bricks to build each of the four walls of a new house. About how many bricks would it take to build all four walls?

   It would take about _____ bricks.

6. There are seven boxes on a truck. Each box has a mass of 650 kg. What is the mass of all the boxes?

   The mass of all the boxes is _____ kg.

7. Each box in problem 6 has a value of $845. What is the value of all the boxes?

   The value is $_____.

8. Ms. Brooks travels 1025 km each week. How many kilometres will she travel in 6 weeks?

   She will travel _____ km.

1.	2.
3.	4.
5.	6.
7.	8.

Lesson 3 Checking Division

```
     442
3) 1326                Check     442
   1200                          ×3
    126   These should -------→ 1326
    120   be the same.
      6
      6
      0
        To check 1326 ÷ 3 = 442,
        multiply 442 by 3.
```

```
      3453
5) 17265                 Check    3453
   15000                          ×5
    2265   These should -------→ 17 265
    2000   be the same.
     265
     250
      15   To check 17 265 ÷ 5 = 3453,
      15   multiply 3453 by _____.
       0
```

Divide. Check each answer.

         a   *b*   *c*

1. 3) 2 4 6   5) 6 7 5   9) 9 8 1

2. 9) 1 5 6 6   7) 7 8 4 7   4) 6 2 5 6

3. 3) 1 7 1 0   7) 1 4 3 5   2) 9 8 5 8

Lesson 3 Problem Solving

Solve each problem. Check each answer.

1. A plane travelled 900 km in 2 h. The same distance was travelled each hour. How far did the plane travel each hour?

   _____ km were travelled each hour.

2. A lunchroom served 960 lunches in 3 h. The same number of lunches was served each hour. How many lunches were served each hour?

   _____ lunches were served each hour.

3. A company has 7200 workers. There are eight plants with the same number of workers at each plant. How many workers are at each plant?

   _____ workers are at each plant.

4. A school ordered 2688 books. The books will be delivered in seven equal shipments. How many books will be in each shipment?

   _____ books will be in each shipment.

5. A shipping company had 5900 kg of freight delivered in five loads. Each load had the same mass. Find the mass of each load.

   The mass of each load was _____ kg.

6. There are 1200 kJ of energy in six handfuls of roasted peanuts. How many kilojoules are there in one handful of roasted peanuts?

   _____ kJ are in one handful of peanuts.

7. A refinery filled 8652 oil cans in 3 h. The same number of cans was filled each hour. How many cans were filled each hour?

   _____ cans were filled each hour.

1.	
2.	3.
4.	5.
6.	7.

Lesson 4 Checking Division

```
       263 r4
   7) 1845 ←          Check      263
      14                          ×7
      ----                      ----
      445                        1841
      42       These should       +4
      ----     ---               ----
      25       be the same. → 1845
      21
      ----
      4
```

To check the division,
multiply 263 by 7 and
then add the remainder 4.

Divide. Check each answer.

a	*b*	*c*

1. 2) 1 5 7   5) 6 7 9   4) 8 0 7

2. 3) 1 3 4 9   6) 7 8 5 5   7) 9 4 6 3

3. 9) 1 2 3 4   8) 9 6 5 4   6) 9 7 8 5

Lesson 4 Problem Solving

Solve each problem. Check each answer.

1. A marching band has 126 members. How many rows of eight members each can be formed? How many members will be in the next row?

_____ rows can be formed.

_____ members will be in the next row.

2. Mr. Carpenter has 228 floor tiles. How many rows of nine tiles each can he lay? How many tiles will be left over?

He can lay _____ rows of nine tiles each.

_____ tiles will be left over.

3. Seven pirates want to share 1006 coins so that each will get the same number of coins. How many coins will each pirate get? How many coins will be left over?

Each pirate will get _____ coins.

_____ coins will be left over.

4. There will be 1012 people at a large banquet. Six people will sit at each table. How many tables will be filled? How many people will sit at a table that is not completely filled?

_____ tables will be filled.

_____ people will sit at a table that is not completely filled.

5. Last week 2407 empty bottles were returned to a store. How many cartons of eight bottles each could be filled? How many bottles would be left over?

_____ cartons could be filled.

_____ bottles would be left over.

1.
2.
3.
4.
5.

Lesson 5 Estimation (products)

Estimate 27 × 5.

Round 27 to its highest place value. Then, multiply by 5.

$$27 \longrightarrow 30$$
$$\underline{\times 5} \qquad \underline{\times 5}$$
$$150 \ (3 \times 5 = 15 \text{ and then write the zero})$$

27 × 5 is about 150.

Estimate each answer.

	a	b	c	d	e
1.	57 ×6	23 ×9	45 ×8	62 ×3	97 ×9
2.	21 ×2	72 ×7	57 ×4	93 ×6	38 ×5
3.	183 ×2	786 ×8	359 ×7	223 ×6	627 ×9
4.	685 ×5	428 ×9	262 ×4	219 ×3	812 ×7
5.	2082 ×3	7563 ×9	8235 ×6	6752 ×5	4913 ×8
6.	7921 ×9	8339 ×3	4275 ×8	2712 ×9	3657 ×6

Lesson 5 Problem Solving

Solve each problem.

1. A grocer ordered eight cartons of cookies. There are 18 boxes in each carton. About how many boxes of cookies did he order?

   about _____ boxes

2. Over the summer, Joe went on a bike ride 34 times. Each time he rode 8 km. About how far did he ride his bike in all?

   about _____ km

3. Six classes of students signed up for the Fun Run. Each class has 22 students. About how many students signed up to run?

   about _____ students

4. For a fundraiser, Prairie View School District collected box tops. The goal was for each of the 628 students to bring in eight box tops. If everyone brought in eight box tops, about how many would the district have?

   about _____ box tops

5. Eight girls stuffed envelopes for a campaign. They each filled 415 envelopes. About how many envelopes did they fill in all?

   about _____ envelopes

6. Each grandchild in Mrs. Wheeler's family saved $7 so that they could buy Grandma Jean a special gift. There are 13 grandchildren in the family. About how much money did they save?

   about _____

7. Doris' Dishwasher Depot had a big sale. She sold eight dishwashers in one day. Each one sold for $685. About how much money did she collect at her sale?

   about _____

1.

2.

3.

4.

5.

6.

7.

Lesson 6   Estimation (quotients)

Estimate $9\overline{)8078}$.

Since $9\overline{)81}$ is a familiar division fact, round 8078 to the nearest hundred, 8100.

$9\overline{)8078}$ $\longrightarrow$ $9\overline{)8100}^{\,900}$ (81 ÷ 9 = 9 and then write the zeros)

$9\overline{)8078}$ is about 900.

Estimate each answer.

	a	b	c	d	e
1.	$2\overline{)104}$	$9\overline{)266}$	$7\overline{)629}$	$9\overline{)362}$	$6\overline{)239}$
2.	$4\overline{)123}$	$8\overline{)639}$	$6\overline{)419}$	$2\overline{)125}$	$3\overline{)256}$
3.	$2\overline{)147}$	$3\overline{)215}$	$6\overline{)335}$	$3\overline{)191}$	$7\overline{)227}$
4.	$3\overline{)1819}$	$9\overline{)2695}$	$3\overline{)1819}$	$9\overline{)2695}$	$3\overline{)8755}$
5.	$5\overline{)5254}$	$7\overline{)4896}$	$6\overline{)2321}$	$5\overline{)4459}$	$6\overline{)3728}$
6.	$9\overline{)7122}$	$8\overline{)2691}$	$8\overline{)1562}$	$8\overline{)4721}$	$5\overline{)2682}$

Lesson 6 Problem Solving

Solve each problem.

1. Ms. Garner, the science teacher, gave her seven students 136 tadpoles to observe. About how many tadpoles did each student receive?

   about _____ tadpoles

2. At the swimming party, 318 students were divided among the eight pools. About how many students swam in each pool?

   about _____ students

3. After Daniel baked nine batches of cookies, he had 454 cookies. About how many cookies were made in each batch?

   about _____ cookies

4. Lien divided 729 pennies into nine equal piles. About how many pennies were in each pile?

   about _____ pennies

5. Nine teachers had 1910 tests to mark. About how many tests will each teacher mark?

   about _____ tests

6. The school library has 1585 books that are placed on shelves. If there are eight shelves in the library, about how many books are on one shelf?

   about _____ books

7. At a concert, 2698 screaming fans wanted the autographs of the nine singers. If each fan gets only one autograph, about how many autographs did each singer sign?

   about _____ autographs

1.

2.

3.

4.

5.

6.

7.

CHAPTER 11   PRACTICE TEST
Multiplication and Division

Multiply or divide. Check each answer.

	a	*b*	*c*
1.	$\begin{array}{r} 2\,1\,3 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 6\,2\,1\,0 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 8\,3\,2\,0 \\ \times 4 \\ \hline \end{array}$
2.	$\begin{array}{r} 3\,2\,4\,5 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 1\,3\,4\,2 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 6\,8\,7\,1 \\ \times 5 \\ \hline \end{array}$
3.	$6\overline{)276}$	$8\overline{)1640}$	$6\overline{)344}$
4.	$6\overline{)565}$	$3\overline{)1457}$	$5\overline{)8371}$

Estimate each answer.

5.	$\begin{array}{r} 7\,7\,4 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 8\,1\,2\,5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5\,9\,7\,8 \\ \times 8 \\ \hline \end{array}$
6.	$7\overline{)557}$	$7\overline{)1381}$	$5\overline{)3467}$

7. Each page of a math book contained eight problems. There were 184 pages in the book.

Use estimation to find about how many problems there are in the book.

about _____ problems

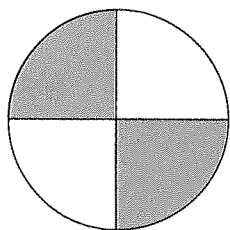Now find the exact answer. How many problems are there in the book?
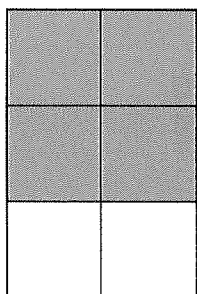
_____ total problems

7.

CHAPTER 12 PRETEST
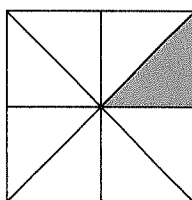## Fractions

What fraction of each figure is shaded?

1.

_____   _____   _____   _____
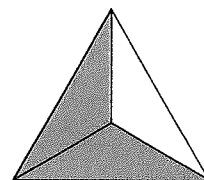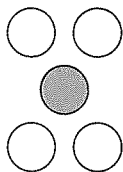
What fraction of each set is shaded?

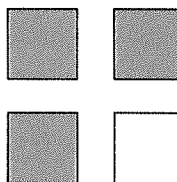**2.**

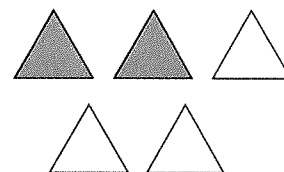_____   _____   _____   _____

Find the number that makes the two fractions equivalent.

3. $\dfrac{1}{8} = \dfrac{}{16}$ $\dfrac{2}{3} = \dfrac{12}{}$ $\dfrac{8}{12} = \dfrac{2}{}$ $\dfrac{3}{6} = \dfrac{}{18}$

Add.

	a	*b*	*c*	*d*

4. $\dfrac{9}{15} + \dfrac{5}{15} =$ $\dfrac{4}{9} + \dfrac{2}{9} =$ $\dfrac{1}{6} + \dfrac{2}{6} =$ $\dfrac{4}{10} + \dfrac{3}{10} =$

Subtract.

5. $\dfrac{4}{5} - \dfrac{2}{5} =$ $\dfrac{6}{7} - \dfrac{3}{7} =$ $\dfrac{2}{6} - \dfrac{1}{6} =$ $\dfrac{8}{9} - \dfrac{3}{9} =$