

## Whole Number Multiplication and Division

## PROBLEM SOLVING

## Thinking skills

## Answer the questions. Show your work.

1. The fifth multiple of a number is the quotient of 480 and 8 . What is the number?
2. Ms. Rodney bakes 1,102 cookies. She packs the cookies into small bags. Each bag has 9 cookies. If 56 cookies are broken and discarded, what is the least number of bags Ms. Rodney needs to pack all the remaining cookies?
3. A store manager ordered 28 crates of mangoes. There were 36 mangoes in each crate. When the mangoes were delivered, he sold the ripe mangoes and repacked the rest equally into 73 boxes. There were 12 mangoes in each box. How many ripe mangoes were sold?


## PROBLEM SOLVING

## strategies

## Answer the questions. Show your work.

4. Ms. Andrews distributed 1,000 pens among her students.

She put the remaining pens into 120 packets of 5 pens each.
How many pens did Ms. Andrews have at first?
5. I am a 4-digit number.

I am divisible by 6 , but not by 9 .
The product of my first two digits is 20 , and the difference between my last two digits is 3 .
All my digits add up to 24 , and my digit with the least value is 4 .
When my first and last digits are added, the sum is 11 .
All my digits are different. What number am I?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| 1st digit | 2nd digit | 3rd digit | 4th digit |

6. Fill in the blanks. Use the least possible divisor.

$$
\square \div 143 \text { R } 6
$$

7. Jared has some birds and dogs in his garden. He counts a total of 12 heads and 30 legs in all. How many birds and dogs are in Jared's garden?

8. Mr. Winters borrowed tables and chairs for a party. The number of chairs borrowed by Mr. Winters is 3 times the number of tables. If there are 80 legs on the furniture altogether, how many tables and chairs did Mr. Winters borrow?


## PROBLEM SOLVING

Exploration

## Answer the questions.

9. Write 8,216 in as many ways as possible.

Example
$8,216=8$ thousands 21 tens 6 ones
10. Write two division problems by using the words and numbers given below.

| Mr. Jackson | children | child | \$250 | \$1,250 |
| :---: | :---: | :---: | :---: | :---: |
| how | much | money | divides | 5 |

a. $\qquad$
$\qquad$
b. $\qquad$
$\qquad$

## Name:

$\qquad$ Date: $\qquad$

## Journal Writing

## Solve.

11. Write the steps you use to multiply 3,275 by 5 .

$$
\text { Step } 1
$$

Step 2

Step 3

Step 4
12. Find the actual product.


## Solve.

Kelvin and Melvin made mistakes while solving these problems. Explain the mistakes they made.
13. Kelvin

$$
\begin{array}{r}
4,075 \\
\times \quad 5 \\
\hline 2003525
\end{array}
$$

$\qquad$
$\qquad$
14. Melvin $4,075 \div 5=8,105$
$\qquad$
$\qquad$

Write the steps used to estimate the product.
15. $827 \times 53$

Step 1

Step 2 $\qquad$

Step 3

