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# 1

# Operations with Whole Numbers

## EXAMPLES

1. Find the sum of 4,297 and 970 and the difference between them.

$$\begin{array}{r} \overset{1}{4},\overset{1}{2}97 \\ + \quad 970 \\ \hline \text{sum} \rightarrow 5,267 \end{array}$$

$$\begin{array}{r} \overset{3}{4},\overset{12}{2}97 \\ - \quad 970 \\ \hline \text{difference} \rightarrow 3,327 \end{array}$$

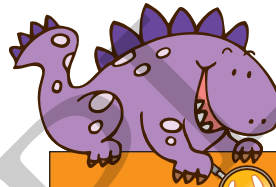
2. Find the product of 296 and 4.

$$\begin{array}{r} \overset{2}{2}96 \\ \times \quad 4 \\ \hline 4 \\ \uparrow \\ 6 \times 4 = 24 \end{array} \rightarrow \begin{array}{r} \overset{3}{2}\overset{2}{9}6 \\ \times \quad 4 \\ \hline 84 \\ \uparrow \\ 9 \times 4 + 2 = 36 + 2 = 38 \end{array} \rightarrow \begin{array}{r} \overset{3}{2}96 \\ \times \quad 4 \\ \hline 1,184 \leftarrow \text{product} \\ \uparrow \\ 2 \times 4 + 3 = 8 + 3 = 11 \end{array}$$

3. Find the quotient when 511 is divided by 7.

$$\begin{array}{r} 73 \leftarrow \text{quotient} \\ 7 \overline{) 511} \\ \underline{49} \leftarrow 7 \times 7 = 49 \\ 21 \leftarrow \text{bring down 1} \\ \underline{21} \leftarrow 7 \times 3 = 21 \end{array}$$

$51 - 49 = 2$



## HINTS:

- Align all numbers on the right-hand side when doing vertical addition, subtraction, and multiplication.
- In doing addition or multiplication, remember to bring groups of 10 to the column on the left if the sum or product of a column is greater than 10.
- In doing subtraction, regroup a 10 from the column on the left if you can't take away.
- Continue to divide until the remainder is smaller than the divisor.

### Find the answers mentally.

①  $2 \times 7 \times 50 =$  \_\_\_\_\_

②  $5,700 \div 10 =$  \_\_\_\_\_

③  $5 \times 8 \times 20 =$  \_\_\_\_\_

④  $2,000 \times 35 =$  \_\_\_\_\_

⑤  $5 \times 29 \times 2 =$  \_\_\_\_\_

⑥  $27,000 \div 300 =$  \_\_\_\_\_

⑦  $1,000 \times 20 \div 100 =$  \_\_\_\_\_

⑧  $2 \times 62 \times 5 =$  \_\_\_\_\_

⑨  $2,000 \div 100 \times 5 =$  \_\_\_\_\_

⑩  $30 \times 100 \div 10 =$  \_\_\_\_\_

⑪  $500 \div 50 \times 100 =$  \_\_\_\_\_

⑫  $400 \div 100 \times 10 =$  \_\_\_\_\_

**Do the calculation.**

⑬ $2,784 + 3,796$	⑭ $999 - 888$	
⑮ $2,784 + 4,370 - 401$	⑯ $4,983 + 3,974 - 728$	
⑰ $595 \div 7$	⑱ $314 \times 8$	⑲ $438 \div 6$
⑳ $5 \overline{) 325}$	㉑ $3 \overline{) 873}$	㉒ $8 \overline{) 736}$
㉓ $\begin{array}{r} 537 \\ \times \quad 9 \\ \hline \end{array}$	㉔ $\begin{array}{r} 854 \\ \times \quad 6 \\ \hline \end{array}$	㉕ $\begin{array}{r} 213 \\ \times \quad 5 \\ \hline \end{array}$

**Find the answers.**

⑳ The sum of seven thousand two and four hundred ninety-nine

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㉑ The difference between nine hundred eighty-four and five hundred seventy-eight

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Write your answers in the puzzle below.

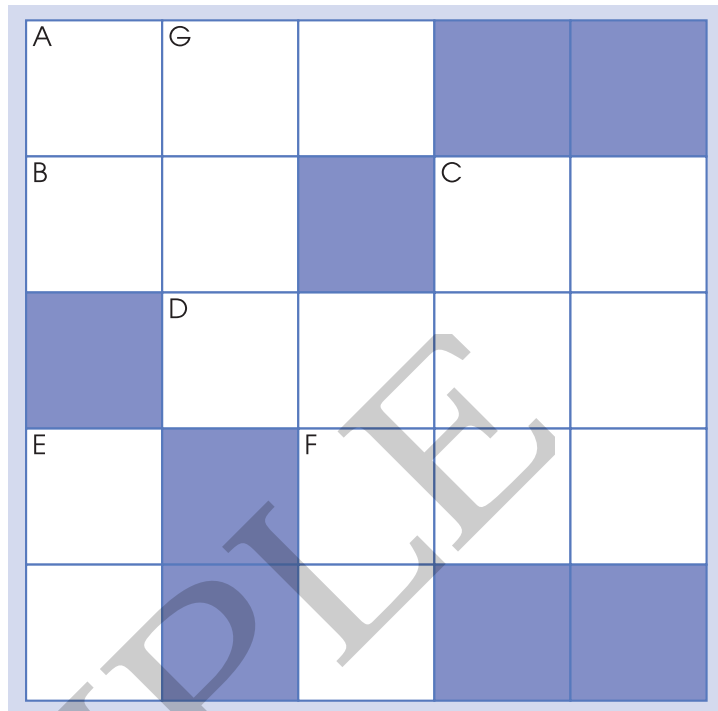
ACROSS

- A  $7 \times 30$
- B  $208 \div 4$
- C  $270 \div 9$
- D  $30 \times 69$
- E  $48 \div 12$
- F  $5 \times 150$

DOWN

- A  $225 \div 9$
- C  $5 \times 75$
- E  $322 \div 7$
- F  $19 \times 4$
- G  $366 \div 3$

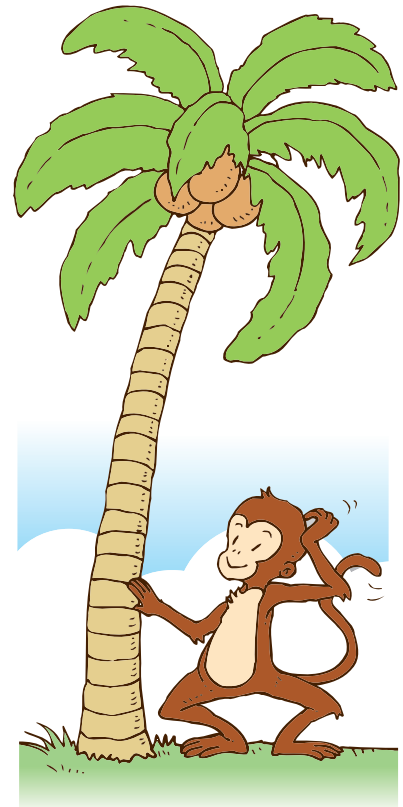
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Do the division and write down the remainder in each case. The sum of the remainders is equal to the number of coconuts in the tree.

- 29  $218 \div 3$  remainder = \_\_\_\_\_
- 30  $497 \div 7$  remainder = \_\_\_\_\_
- 31  $100 \div 3$  remainder = \_\_\_\_\_
- 32  $200 \div 5$  remainder = \_\_\_\_\_
- 33  $124 \div 8$  remainder = \_\_\_\_\_
- 34  $874 \div 4$  remainder = \_\_\_\_\_
- 35 Sum of remainders = \_\_\_\_\_

There are \_\_\_\_\_ coconuts in the tree.

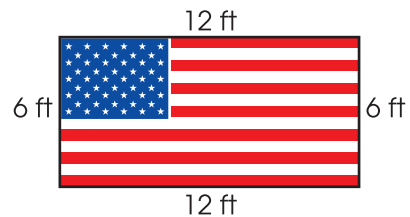


**Solve the problems. Show your work.**

36 Jane is 7 years older than Jeff. Jane is 11 years old. How old is Jeff?

Jeff is \_\_\_\_\_ years old.

37 What is the perimeter of the flag?



38 Dan's heart beats 66 times a minute. How many times does it beat in an hour?

39 Farmer Fred's chickens lay 240 eggs per day. If Fred gets \$2 for one dozen eggs, how much does he earn per day?



**Solve the problems.**

① Write the next 3 numbers in each of the following sequences.

a. 77    88    99    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

b. 72    84    96    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

② A number is divisible by 3 if the sum of its digits is divisible by 3. Using this fact, circle the numbers which are divisible by 3.

1,234    5,790    2,927    9,980    4,563