

Example 3

An art teacher plans to distribute 80 sheets of construction paper equally to each of 10 students. How many sheets of construction paper should each student receive?

We think, “How many 10s make 80?” Since $8 \times 10 = 80$, the answer is 8.

$$\begin{array}{r} 8 \\ 10 \overline{)80} \end{array}$$

Each student should receive **8 sheets**.

Thinking Skills

Connect

Why can we write a fact family using multiplication and division?

Multiplication and division are inverse operations. One operation undoes the other. If we start with 5 and multiply by 6, we get a product of 30. If we then divide 30 by 6, the result is 5, which is the number we started with. The division by 6 undid the multiplication by 6. Using the Commutative Property and inverse operations, we find that the three numbers that form a multiplication fact also form division facts.

Example 4

Write two multiplication facts and two division facts for the fact family 5, 6, and 30.

$$\begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 5 \\ \times 6 \\ \hline 30 \end{array}$$

$$5 \overline{)30}$$

$$6 \overline{)30}$$

Lesson

Find the missing number in each division fact:

a. $2 \overline{)16}$

b. $4 \overline{)24}$

c. $6 \overline{)30}$

d. $8 \overline{)56}$

e. $3 \overline{)21}$

f. $10 \overline{)30}$

g. $8 \overline{)56}$

h. $9 \overline{)36}$

- i. **Connect** Write two multiplication facts and two division facts for the fact family 3, 8, and 24.

Written Practice

Distributed and Integrated

Formulate For problems 1 and 2, write an equation and find the answer.

- *1. ⁽¹⁶⁾ The \$45 dress was marked down to \$29. By how many dollars had the dress been marked down?

2. Room 15 collected 243 aluminum cans. Room 16 collected 487 cans.
 (11) Room 17 collected 608 cans. How many cans did the three rooms collect in all?

3. There are 5 rows of desks with 6 desks in each row. How many desks are there in all? Find the answer once by adding and again by multiplying.

* 4. **Represent** Use words to name \$4,587.20.
 (5, 7)

5. **Connect** For the fact family 7, 8, and 56, write two multiplication facts and two division facts.
 (19)

6. $3 \overline{)24}$
 (19)

7. $6 \overline{)18}$
 (19)

8. $4 \overline{)32}$
 (19)

9. $10 \overline{)40}$
 (19)

10. $\begin{array}{r} \$4.83 \\ \times \quad 7 \\ \hline \end{array}$
 (17)

11. $\begin{array}{r} 659 \\ \times \quad 8 \\ \hline \end{array}$
 (17)

12. $\begin{array}{r} \$706 \\ \times \quad 4 \\ \hline \end{array}$
 (17)

13. $9m = 54$
 (18)

14. $8 \times 10 \times 7$
 (18)

15. $9 \times 8 \times 5$
 (18)

16. $\begin{array}{r} \$65.40 \\ - \$19.18 \\ \hline \end{array}$
 (13)

17. $\begin{array}{r} 4000 \\ - \quad t \\ \hline 1357 \end{array}$
 (14)

18. $\begin{array}{r} r \\ - 1915 \\ \hline 269 \end{array}$
 (14)

19. $\begin{array}{r} 907 \\ 415 \\ + 653 \\ \hline \end{array}$
 (6)

20. $\begin{array}{r} \$3.67 \\ \$4.25 \\ + \$7.40 \\ \hline \end{array}$
 (13)

21. $\begin{array}{r} 427 \\ + \quad k \\ \hline 813 \end{array}$
 (10)

22. $356 + l + 67 = 500$
 (10)

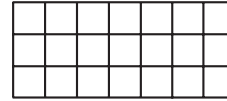
23. $86 + w = 250$
 (10)

24. Find the missing factor: $6 \times 6 = 4n$
 (18)

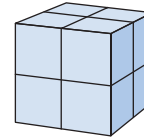
* 25. **Represent** Use digits and symbols to write this comparison:
 (4, 15) *Eight times six is less than seven times seven.*

26. **Explain** Dequon cut a 15-inch-long piece of wood in half. How long was each half? Explain your answer.
 (2)

27. Write a multiplication fact that shows how many squares cover this rectangle.
(13)



28. Write a three-factor multiplication fact that shows how many blocks form this figure.
(18)



29. **Analyze** The Mississippi River begins in Minnesota. From there it flows 2340 miles to the Gulf of Mexico. The Missouri River is 2315 miles long and begins in Montana. The Colorado River is the longest river in the U.S. west of the Rocky Mountains. It starts in the Rocky Mountains and flows 1450 miles to the Gulf of California. Write the names of the three rivers in order from shortest to longest.
(7)

30. Write and solve a subtraction word problem that uses data from this table:
(Inv. 1)

Large Meteor Craters

Location	Diameter (miles)
Sudbury, Canada	125
Vredefort, South Africa	87
Popigai, Russia	62

Early Finishers
Real-World Connection

Four students earned a total of \$136 doing various jobs. They had one hundred dollar bill, 3 ten dollar bills, and 6 one dollar bills. How can the students divide the money equally? Use your money manipulatives to solve the problem.