

Multiplying Whole Numbers

Lesson 9-1

It's Algebra!

Multiplying by Powers of 10

Ricky's job is shoveling snow from his front walk. The walk is 9 meters long. Find the length of Ricky's shoveling job in centimeters.

We want to know how many centimeters of walk Ricky has to shovel.

The walk is _____ meters long.

Each meter contains _____ centimeters. To find the length of the walk in centimeters, we multiply _____ by _____.

Study these multiplications:

$$3 \times 1 = 3$$

$$3 \times 10 = 30$$

$$3 \times 100 = 300$$

$$3 \times 1,000 = 3,000$$

$$4 \times 1 = 4$$

$$4 \times 10 = 40$$

$$4 \times 100 = 400$$

$$4 \times 1,000 = 4,000$$

$$6 \times 2 = 12$$

$$6 \times 20 = 120$$

$$6 \times 200 = 1,200$$

$$6 \times 2,000 = 12,000$$

$$9 \times 6 = 54$$

$$9 \times 60 = 540$$

$$9 \times 600 = 5,400$$

$$9 \times 6,000 = 54,000$$

Multiply the digits that are not zeros. The product has the same number of zeros as there are zeros in the factors.

$$9 \times 100 = \underline{\hspace{2cm}}$$

Ricky's front walk is _____ centimeters long.

Getting Started

Multiply.

1. $6 \times 100 = \underline{\hspace{2cm}}$

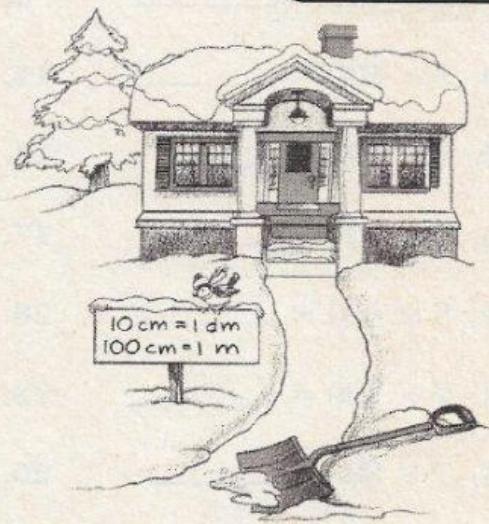
2. $5 \times 100 = \underline{\hspace{2cm}}$

3. $7 \times 1,000 = \underline{\hspace{2cm}}$

4. $9 \times 10 = \underline{\hspace{2cm}}$

5. $7 \times 6,000 = \underline{\hspace{2cm}}$

6. $6 \times 9,000 = \underline{\hspace{2cm}}$



Practice

Multiply.

1. $5 \times 100 =$ _____ 2. $6 \times 3,000 =$ _____ 3. $9 \times 20 =$ _____

4. $7 \times 10 =$ _____ 5. $7 \times 1,000 =$ _____ 6. $3 \times 80 =$ _____

7. $5 \times 400 =$ _____ 8. $2 \times 9,000 =$ _____ 9. $9 \times 700 =$ _____

10. $8 \times 800 =$ _____ 11. $3 \times 5,000 =$ _____ 12. $8 \times 7,000 =$ _____

13. $4 \times 40 =$ _____ 14. $7 \times 300 =$ _____ 15. $2 \times 6,000 =$ _____

16. $6 \times 70 =$ _____ 17. $5 \times 2,000 =$ _____ 18. $9 \times 80 =$ _____

19. $5 \times 600 =$ _____ 20. $8 \times 4,000 =$ _____ 21. $9 \times 30 =$ _____

22. $7 \times 700 =$ _____ 23. $6 \times 5,000 =$ _____ 24. $4 \times 300 =$ _____

25. $7 \times 80 =$ _____ 26. $7 \times 6,000 =$ _____ 27. $4 \times 9,000 =$ _____

28. $5 \times 800 =$ _____ 29. $3 \times 700 =$ _____ 30. $8 \times 5,000 =$ _____

31. $2 \times 8,000 =$ _____ 32. $9 \times 9,000 =$ _____ 33. $6 \times 40 =$ _____

34. $2 \times 7,000 =$ _____ 35. $4 \times 500 =$ _____ 36. $9 \times 60 =$ _____

37. $6 \times 6,000 =$ _____ 38. $4 \times 8,000 =$ _____ 39. $9 \times 400 =$ _____

Problem Solving

Solve each problem.

40. How many centimeters long is a table that is 9 decimeters in length?

41. A carton of drinking straws contains 800 straws. How many straws are in 7 cartons?

42. Computers cost \$2,000 each. How much will a school pay for 7 computers?

43. A small car weighs 3,000 pounds. How much do 8 small cars weigh?