Multiplying with 3 Factors

You can use the Associative Property of Multiplication to multiply three factors. The Associative Property states that the way the factors are grouped does not change the product.

The Associative Property of Multiplication is applied like the Associative Property of Addition.

Addition

$$4 + 3 + 3 = 4 + (3 + 3)$$

$$= 4 + 6$$

$$= 10$$

Multiplication

$$4 \times 3 \times 3 = 4 \times (3 \times 3)$$

= 4×9
= 36

Find the product that is easy to find. Then multiply by the third number.

Find each product. You may draw a picture to help.

1.
$$3 \times 2 \times 1$$

3.
$$3 \times 3 \times 2$$

3.
$$3 \times 3 \times 2$$
 4. $7 \times 3 \times 2$

5.
$$4 \times 2 \times 7$$

6.
$$3 \times 4 \times 5$$

5.
$$4 \times 2 \times 7$$
 6. $3 \times 4 \times 5$ **7.** $2 \times 2 \times 6$

8.
$$2 \times 5 \times 7$$

- **9.** Each package of fruit juice has 2 rows. There are 6 boxes in each row. Mrs. Stokes bought 3 packages. How many boxes of fruit juice did Mrs. Stokes buy? Write a number sentence with your answer.
- **10. Communicate** How do you know that $4 \times 2 \times 2$ is the same as 4×4 ? Explain.