Multiplying by Multiples of 10

A **multiple** of 10 is the product of 10 and another number.

- 20 is a multiple of 10 because $10 \times 2 = 20$.
- 30 is a multiple of 10 because $10 \times 3 = 30$.

These problems will help you think about different ways to solve problems such as 8×20 and 30×5 .

Use Skip Counting

1. List the multiples of 10 from 10 to 200. Skip count by tens.

2. Use skip counting to find 10×16 . Skip count by ten 16 times. Circle the last number.

- **3.** Use skip counting to find 8×20 . Skip count by twenty 8 times.
- **4.** Solve 30×5 using skip counting. Hint: Remember $30 \times 5 = 5 \times 30$.
- **5.** Use skip counting to find 50×7 .

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Use Money

6. $21 \times 10 = ?$ Think: How many pennies have the same value as 21 dimes? Show or tell how you know.

7. A. $10 \times 18 = ?$ Think: How much money is eighteen \$10 bills?

B. $9 \times 20 = ?$ Think: How much money is nine \$20 bills?

Use Grouping

8. Solve $7 \times 30 = 7 \times 3$ tens using groups in different ways.

A.
$$(7 \times 3) \times 10 =$$

A.
$$(7 \times 3) \times 10 =$$
 B. $7 \times (3 \times 10) =$ _____

D.
$$7 \times 30 =$$

9. Solve $4 \times 50 = 4 \times 5$ tens using groups in different ways.

A.
$$(4 \times 5) \times 10 =$$
 B. $4 \times (5 \times 10) =$ **...**

B.
$$4 \times (5 \times 10) =$$

C.
$$20 \times 10 =$$
 D. $4 \times 50 =$ **...**

10. Use grouping to solve the following problems. Show your grouping.

A.
$$30 \times 4 =$$
 ______ **B.** $5 \times 70 =$ _____

11. Solve the following problems using any method you wish.

12. Look back at the answers to the problems when you multiplied by multiples of 10. Describe any patterns you see.