# **Introduction to Multiplication**

Grade 3

Operations & Algebraic Thinking (OA)

15 minutes

? 17 Questions

#### **Common Core Standards:**

3.OA.A.1: Interpret products of whole numbers 3.OA.A.3: Use multiplication within 100 to solve word problems 3.OA.C.7: Fluently multiply within 100

Name:	Date:	<b>Score:</b> / 17

### What is Multiplication?

Multiplication is a faster way to add the same number many times. Instead of writing 3+3+3+3, we can write  $4\times3$ , which means "4 groups of 3".

The multiplication symbol ( $\times$ ) means "groups of". When we see 4  $\times$  3, we read it as "four times three" or "four groups of three". The answer is called the product.

Think of multiplication like this: If you have 4 bags and each bag has 3 apples, how many apples do you have in total? You have  $4 \times 3 = 12$  apples!

The two numbers we multiply are called factors. In  $4 \times 3 = 12$ , both 4 and 3 are factors, and 12 is the product.

# **Worked Examples**

Study these examples carefully before starting the practice questions.

### **Example 1**

**Problem:**  $3 \times 4 = ?$ 

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This means 3 groups of 4

- 1. We can think of this as: 4 + 4 + 4
- 2. Let's add: 4 + 4 = 8
- 3. Then: 8 + 4 = 12
- 4. So  $3 \times 4 = 12$

Answer: 12

### **Example 2**

**Problem:** A farmer has 5 baskets. Each basket has 3 eggs. How many eggs does the farmer have?

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This is a multiplication word problem

- 1. We have 5 baskets
- 2. Each basket has 3 eggs
- 3. We need to find:  $5 \times 3$
- $4.5 \times 3 = 3 + 3 + 3 + 3 + 3 = 15$

**Answer:** 15 eggs

## Example 3

**Problem:**  $2 \times 5 = ?$ 

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This means 2 groups of 5

- 1. We have 2 groups
- 2. Each group has 5 items
- $3.2 \times 5 = 5 + 5$
- 4.5 + 5 = 10
- 5. So  $2 \times 5 = 10$

Answer: 10

Solve each problem. Show your work in the space provided.

**11.** Write  $4 \times 3$  as repeated addition and find the answer.

**12.** Write  $2 \times 3$  as repeated addition and find the answer.

**13.** Write  $2 \times 4$  as repeated addition and find the answer.

**14.** A baker made 3 trays of cookies. Each tray has 6 cookies. How many cookies did the baker make?

**15.** There are 4 boxes. Each box has 5 crayons. How many crayons are there in total?

**16.** There are 5 flowers in each vase. There are 6 vases. How many flowers are there?

**17.** A baker made 2 trays of cookies. Each tray has 6 cookies. How many cookies did the baker make?