3.OA.1

# MY Homework

Lesson 8

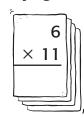
**Multiply by 11** and 12

# Homework Helper Need help? ConnectED.mcgraw-hill.com



Felisa can put 6 photos on each page of her scrapbook. How many photos can she place altogether on 11 pages?

Find  $6 \times 11$ . Write multiplication vertically or horizontally.



One Way Use repeated addition.

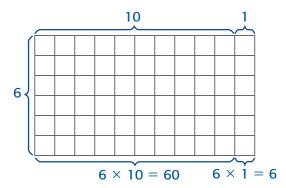
$$6 \times 11 =$$
 $11 + 11 + 11 + 11 + 11 + 11 = 66$ 

#### **Another Way** Decompose 11 into 10 + 1.

Decompose 11 into the addends 10 + 1.

Multiply each p
$$6 \times 10 = 60$$
 $6 \times 1 = 6$ 

Multiply each part. 
$$6 \times 10 = 60$$
 Add.  $60 + 6 = 66$ 



So,  $6 \times 11 = 66$ .

Felisa can place 66 photos on 11 pages in her scrapbook.

#### **Practice**

Write an addition sentence and a multiplication sentence for each.

1. 5 rows of 11 counters 
$$11 + 11 + 11 + 11 + 11 = 55$$

**2.** 3 rows of 12 counters 
$$\frac{12}{12} + \frac{12}{12} = \frac{36}{12}$$

Use repeated addition to find each product.

**3.** 
$$3 \times 11 =$$
 **33**

Decompose one factor to find each product.



## Problem Solving

**7.** How many eggs are there altogether in 7 dozen eggs? (*Hint*: 1 dozen = 12)

84 eggs

8. How many months are in 6 years?

72 months

**9.** A certain butterfly has 9 spots. How many spots would 11 of these butterflies have?

99 spots

10. PRACTICE Keep Trying Luke can run a mile in 7 minutes. Colleen can run a mile in 5 minutes. At this rate, how much longer would it take Luke to run 11 miles than it would take Colleen to run 11 miles?

22 minutes



### **Test Practice**

11. Which number sentence does *not* belong with the other three?

(A) 
$$4 \times 12 = 48$$

$$6 + 12 = 16$$

(B) 
$$12 \times 4 = 48$$