Name: _____          Date: _____

# Multiplying with Area Model

12 meters

8 meters
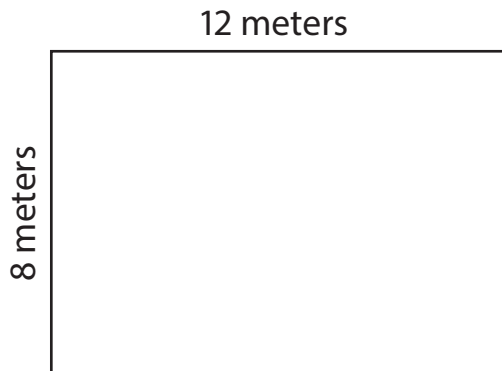
When we find the area of a rectangle, we multiply length x width.

**Area = Length x Width**

10          2

8 | 10 x 8 = <span style="color:red">80</span> | 2 x 8 = <span style="color:red">16</span>
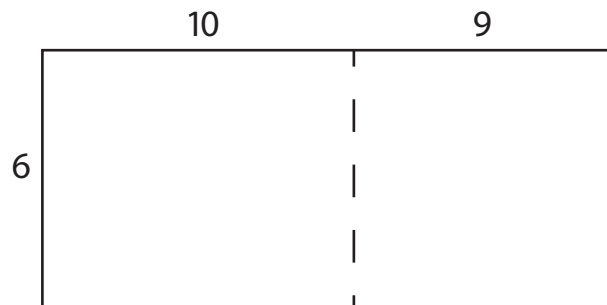
**12 x 8 = 96**
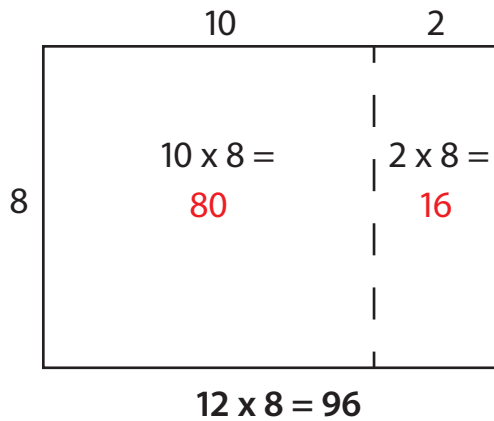
We can use the concept of area to help us multiply big numbers

1. Draw a rectangle with one factor as the width and the other factor as the length.

2. Decompose large factors into smaller numbers so they are easier to multiply. For example, 12 can be decomposed into 10 + 2.

3. Find the area of each part of the rectangle. Then, add the products together to find the total area. The area of the rectangle is the answer to the multiplication problem!

**Try it!** Use the area model to solve the multiplication problem below.

**19 x 6 = _____**

10          9

6
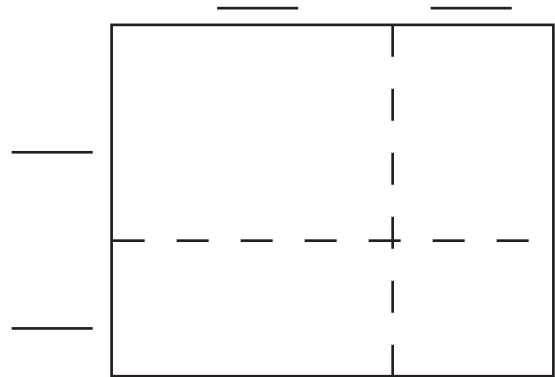
# Multiplying with Area Model

Use the area model to solve each multiplication problem below.

1. **15 x 7** = _____

2. **14 x 12** = _____

3. **13 x 8** = _____
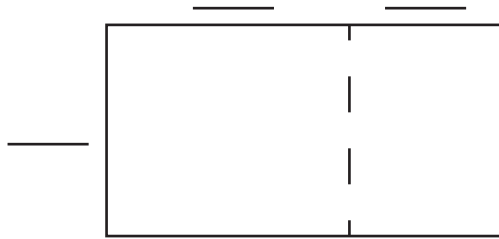
4. **17 x 11** = _____
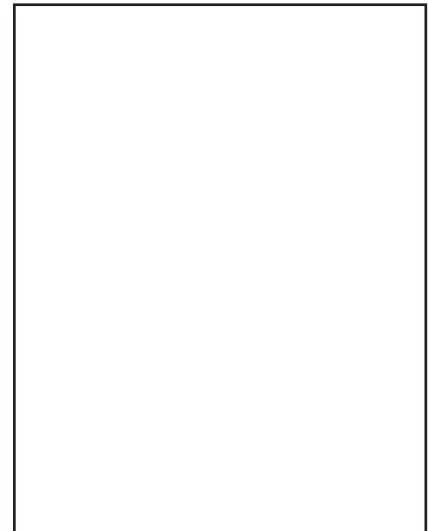
Now, try drawing your own area model.

5. **16 x 4** = _____