

Multiply by Tens

One section of seating at an arena has 30 rows. Each row has 40 seats. How many seats in all are in that section?

Multiply. 30×40

Step 1 Think of each factor as a multiple of 10 and as a repeated addition.

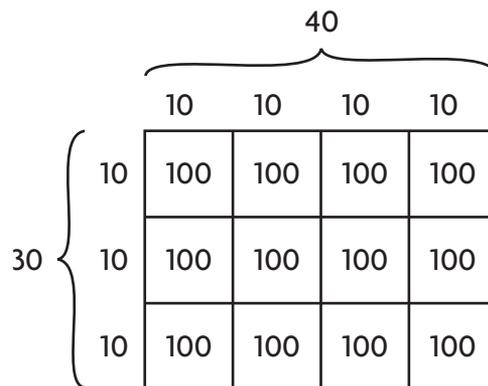
$$30 = \underline{3} \times \underline{10} \text{ or } \underline{10} + \underline{10} + \underline{10}$$

$$40 = \underline{4} \times \underline{10} \text{ or } \underline{10} + \underline{10} + \underline{10} + \underline{10}$$

Step 2 Draw a diagram to show the multiplication.

Step 3 Each small square in the diagram shows 10×10 , or 100. Count the squares.

There are 12 squares of 100.



Step 4 Use patterns and mental math to find 12×100 .

$$12 \times 1 = \underline{12}$$

$$12 \times 10 = \underline{120}$$

$$12 \times 100 = \underline{1,200}$$

There are 1,200 seats in that section.

Choose a method. Then find the product.

1 $20 \times 90 =$ _____ **2** $40 \times 40 =$ _____ **3** $60 \times 70 =$ _____

4 $50 \times 30 =$ _____ **5** $80 \times 60 =$ _____ **6** $90 \times 40 =$ _____