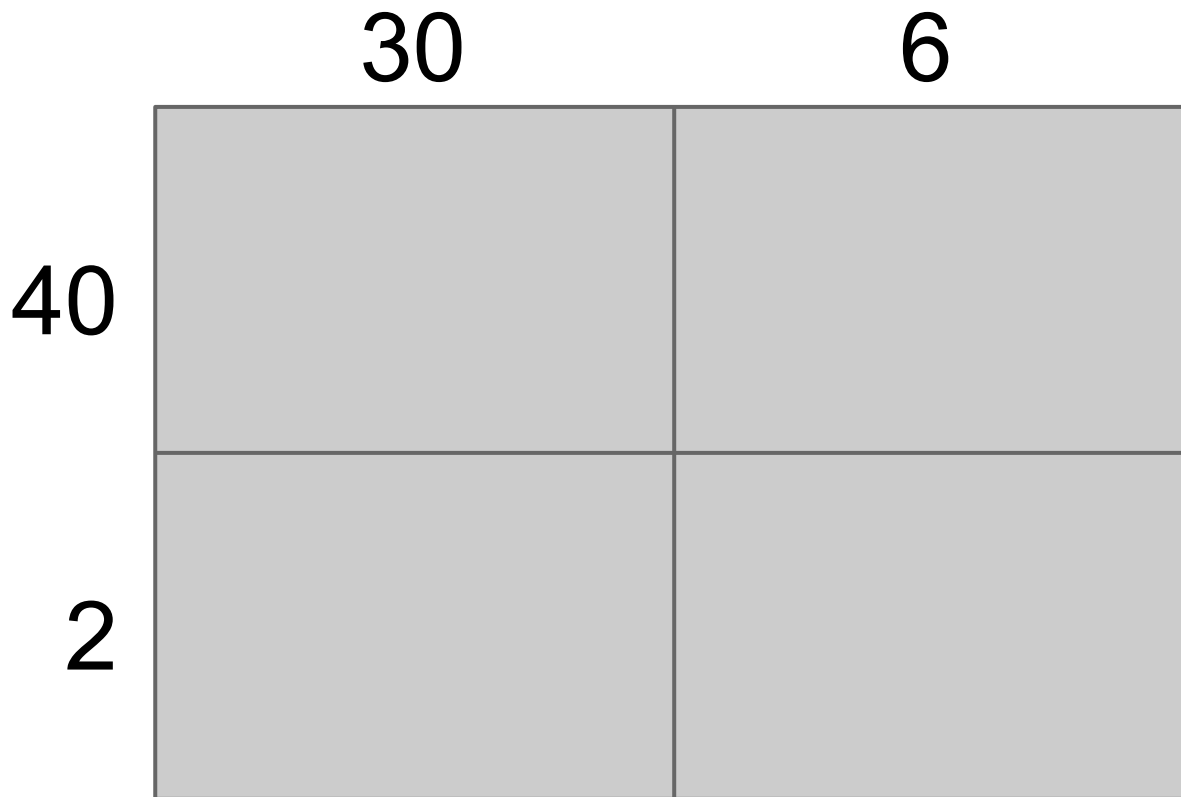


2x2 Multiplication

The "Box" Method

Sample Problem: 36×42

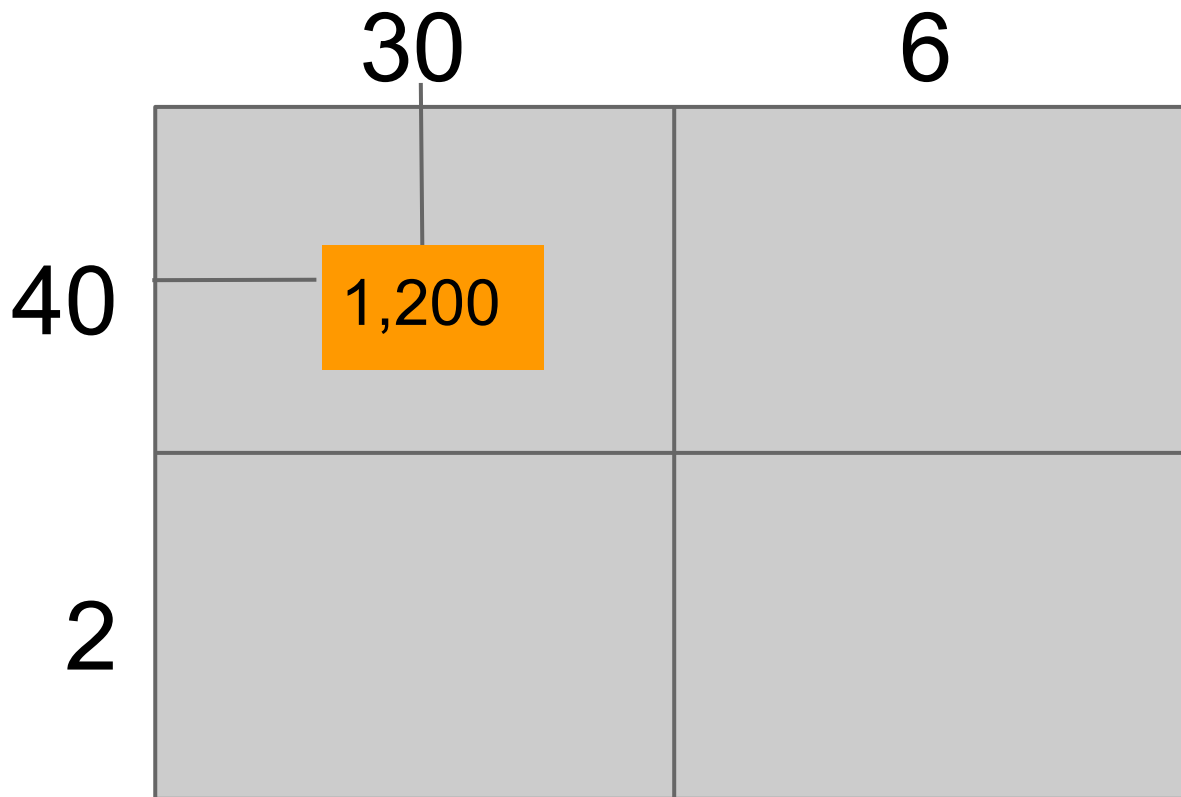
Step 1: Write both numbers in expanded form, one set across the top, the other down one side.



Sample Problem: 36×42

Step 2: Locate where each number meets inside box #1. Multiply the two numbers.

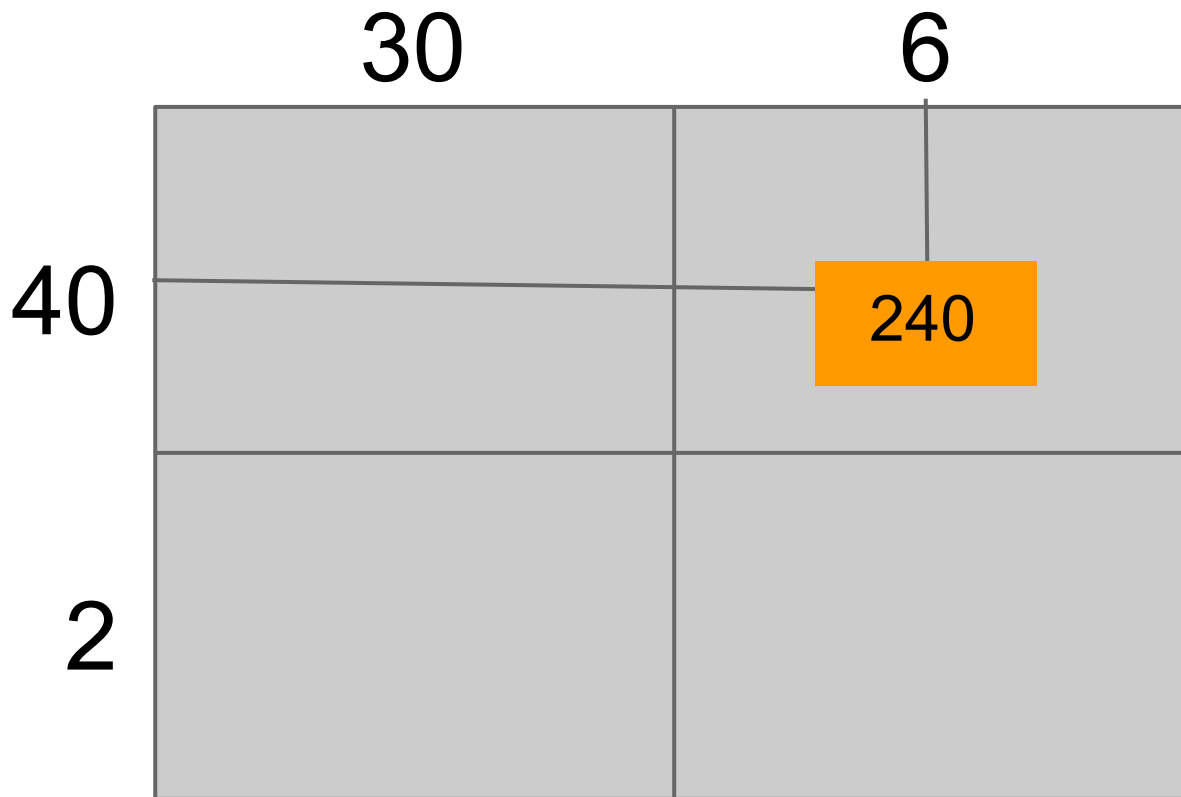
Strategy: Multiply the basic fact, then add the zeroes. $40 \times 30 \rightarrow 4 \times 3 = 12$ plus 2 zeroes = 1,200



Sample Problem: 36 x 42

Step 3: Locate where each number meets inside box #2. Multiply the two numbers.

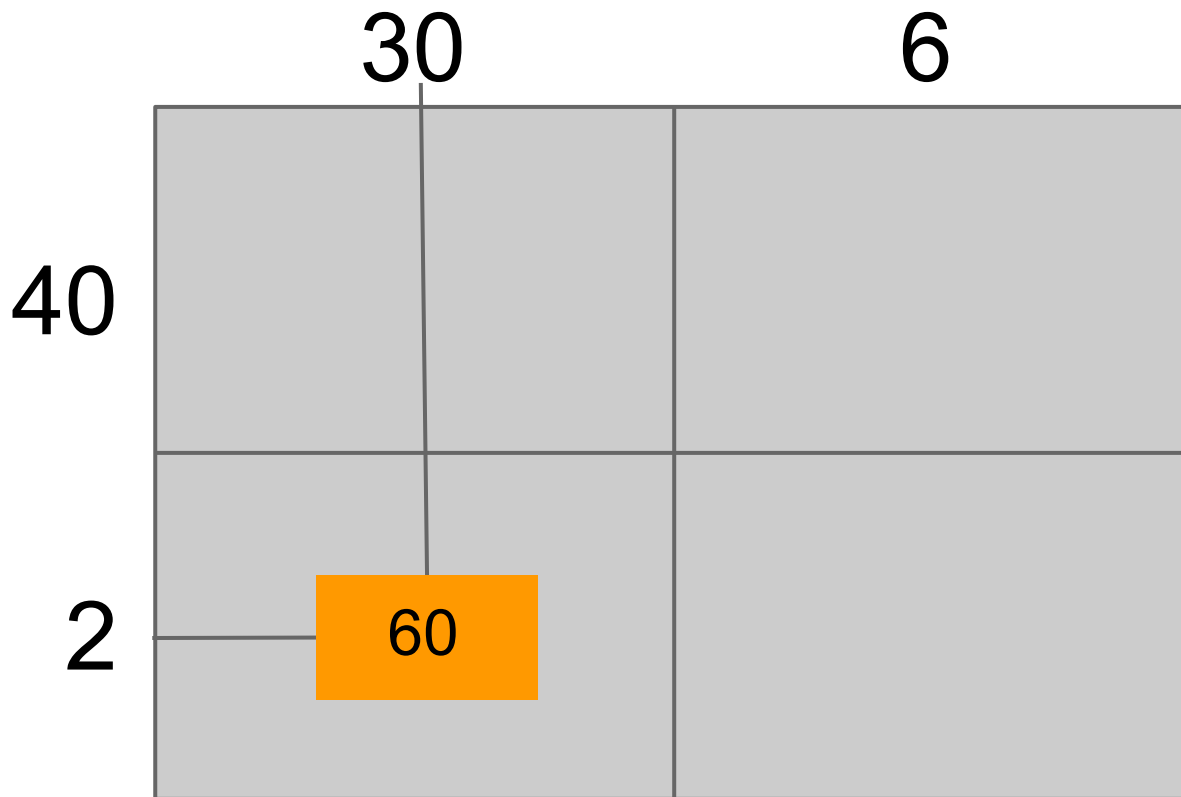
Strategy: Multiply the basic fact, then add the zeroes. $40 \times 6 \rightarrow 4 \times 6 = 24$ plus 1 zero = 240



Sample Problem: 36×42

Step 4: Locate where each number meets inside box #3. Multiply the two numbers.

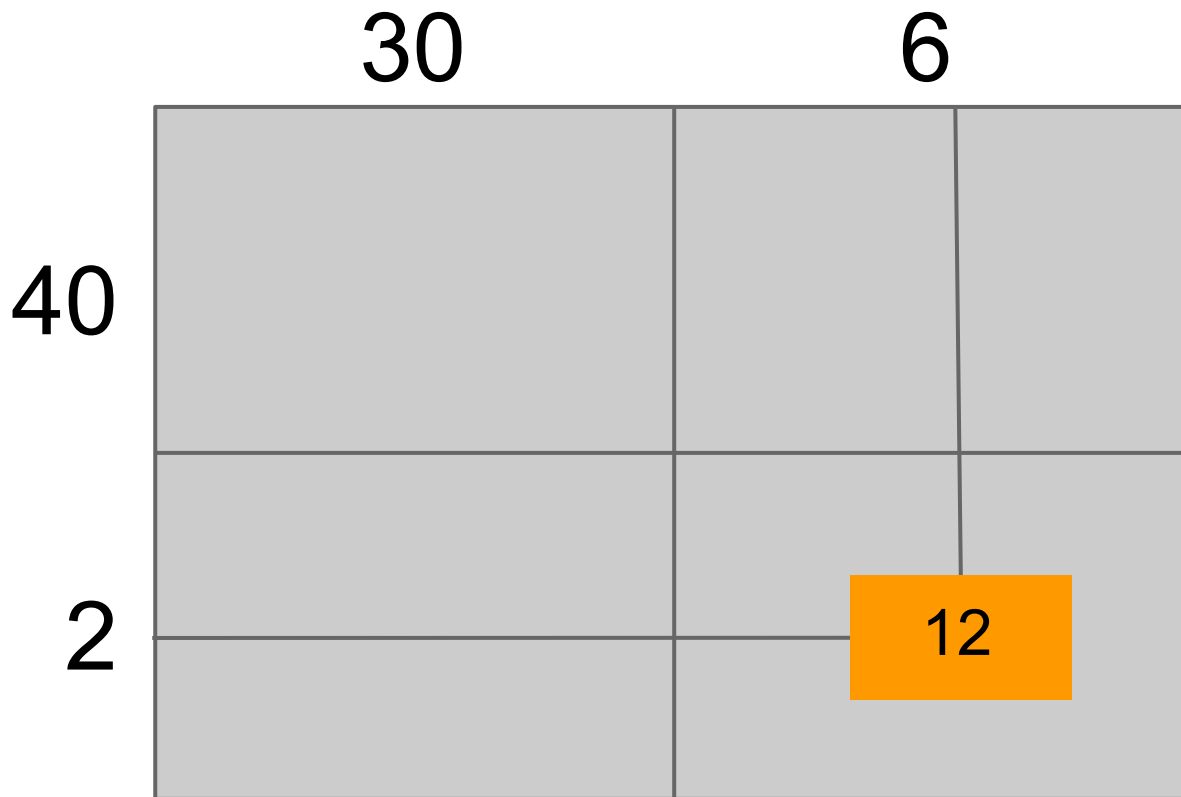
Strategy: Multiply the basic fact, then add the zeroes. $30 \times 2 \rightarrow 3 \times 2 = 6$ plus 1 zero = 60



Sample Problem: 36×42

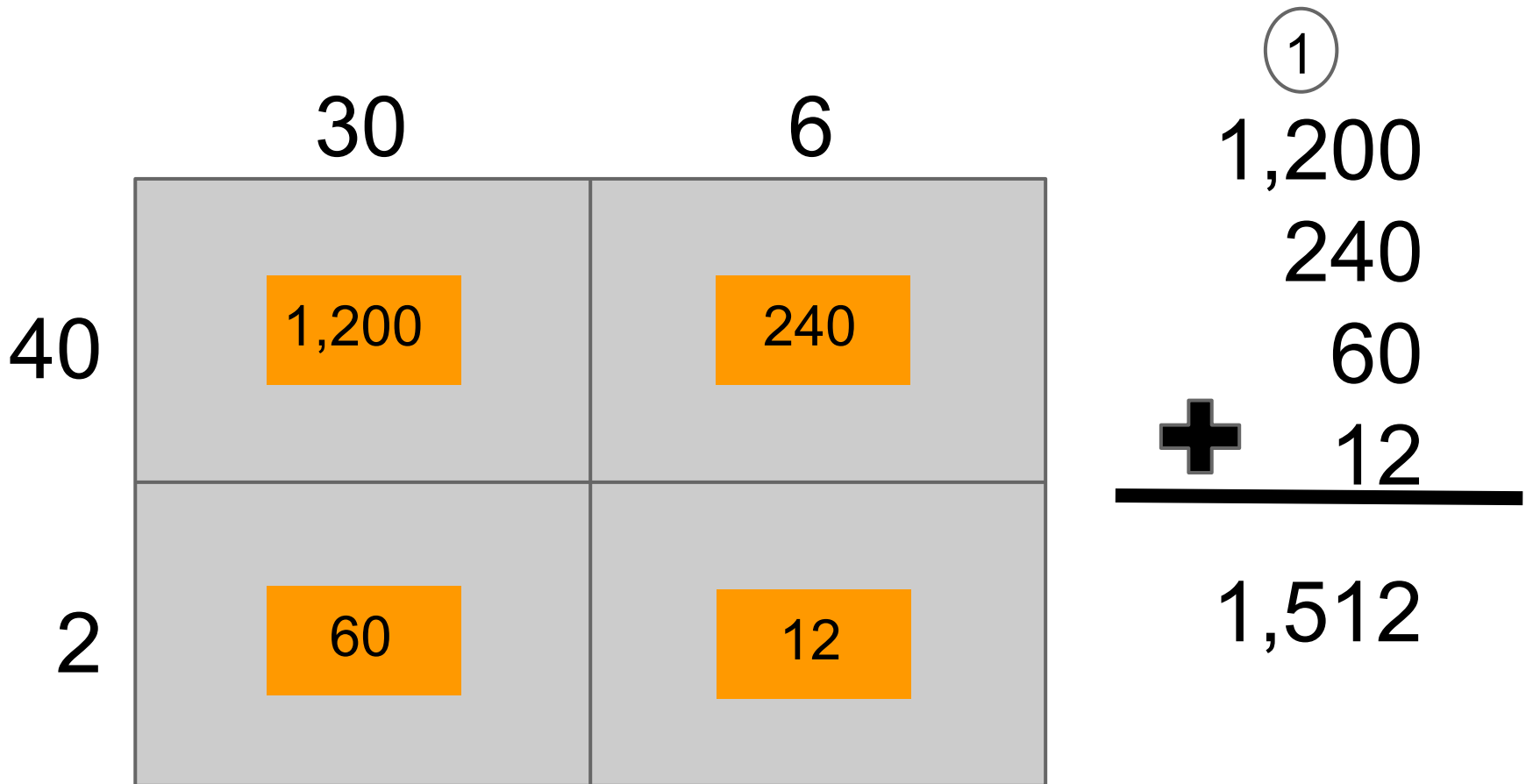
Step 5: Locate where each number meets inside box #4. Multiply the two numbers.

Strategy: Multiply the basic fact, then add the zeroes. $2 \times 6 \rightarrow 2 \times 6 = 12$ plus no zeroes = 12



Sample Problem: 36×42

Step 6: Add the 4 numbers from each box together.



Step 7: Bask in your awesomeness.

$$36 \times 42 = 1,512$$