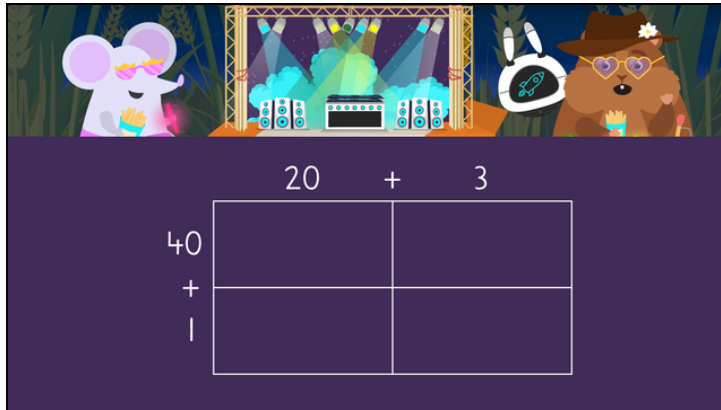


Worksheets to print out from [sofatutor.com](https://www.sofatutor.com)

# Multiplying Two-Digit Numbers by Two-Digit Numbers Using an Area Model



- 1 Create an area model using the digits that have been provided.
- 2 An area model is used as a strategy to solve what kind of equations?
- 3 In the equation  $45 \times 72$ , what is the expanded form of 72?
- 4 What are the steps to creating an area model that help us solve 2 digit by 2 digit multiplication?
- 5 Solve the equation  $34 \times 52$
- 6 Complete the area model.
- + with many hints, answer keys, and solution approaches for all tasks



The complete package, including all tasks, hints, solutions, and solution approaches, is available to all subscribers of [sofatutor.com](https://www.sofatutor.com)

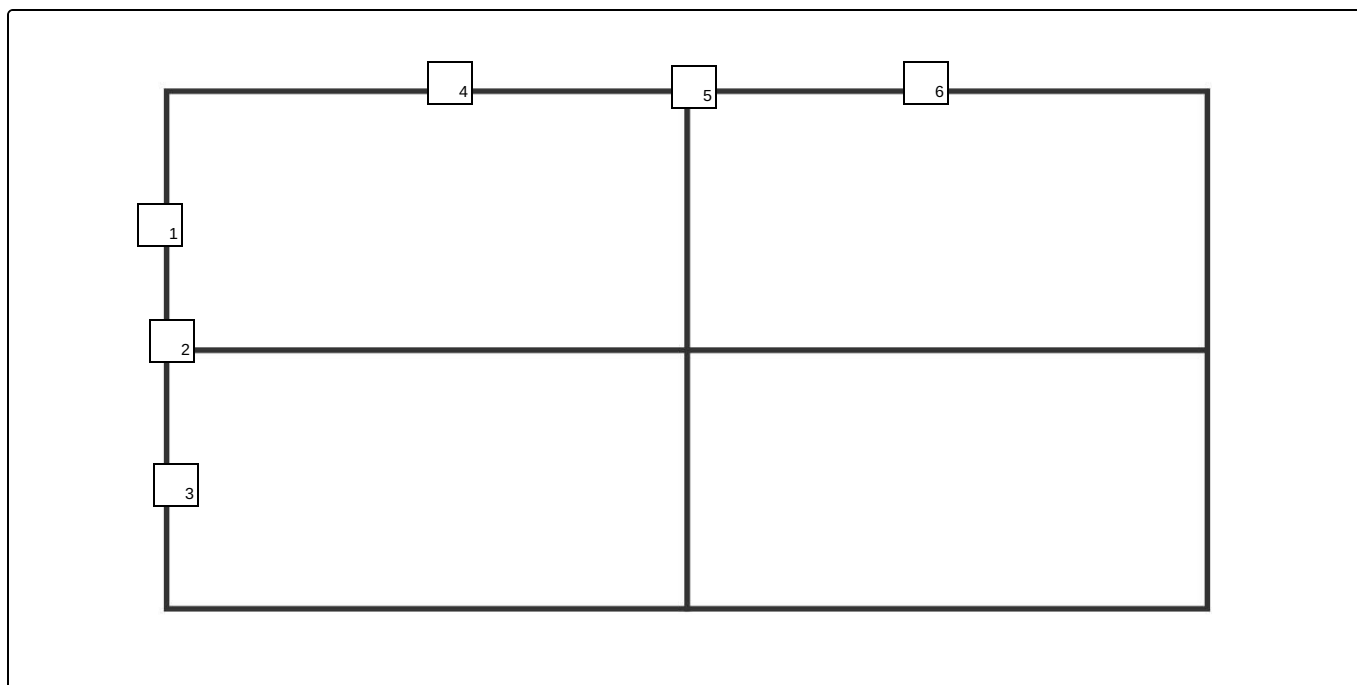
## Create an area model using the digits that have been provided.

Select the correct digits for each place.



Mr. Squeaks and Imani need your help creating an area model for the equation  $94 \times 63$ .

90   4   +   3   +   60



## Our hints for the tasks

1  
from 6

### Create an area model using the digits that have been provided.

#### 1. Hint

Remember, place means where the digit is located within a number and value means how much the digit is worth.

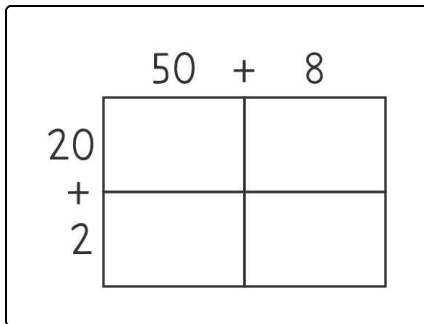
---

#### 2. Hint

Use place value to expand your numbers.

---

#### 3. Hint



Here is an example of an area model for  $58 \times 22$ .

---

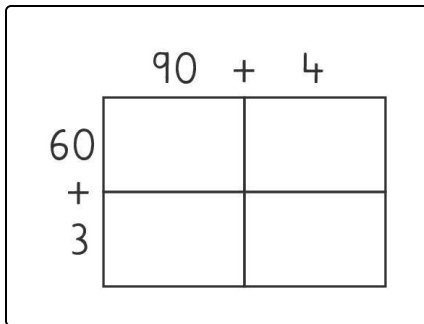
## Solutions and solution approaches for the tasks

1  
from 6

**Create an area model using the digits that have been provided.**

**Answer key:** 1\*: 60 // 2: + // 3\*: 3 // 4\*: 90 // 5: + // 6\*: 4

**\*also correct:** 1: 90 // 3: 4 // 4: 60 // 6: 3



The solution is to expand your factors based on the value. In the factor, 94, the value of the 9 in the **tens** place is 90. The value of the 4 in the **ones** place is 4. So, you label horizontally across the top, 90 + 4. In the factor, 63, the value of the 6 in the **tens** place is 60. The value of the 3 in the **ones** place is 3. So, you label vertically down the side, 60 + 3.

You can also expand 63 across the top as 60 + 3 and expand 94 along the side as 90 + 4. It does not matter which number you

expand across the top versus along the side as long as you expand them correctly.