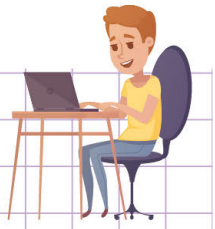
mathskills4kids

Name: ..... Class: .....

Multiply 2-digits numbers by 2-digit numbers using area models



1. Represent 27 x 45 using area model.

2. Find the product of 31 x 12 using the area model method.

4. Represent 49 x 17 using area model.

5. Find the product of 33 x 94 using the area model method.

Solution

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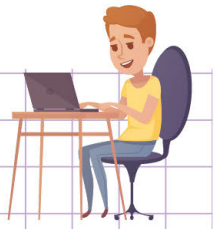

1. Represent 27 x 45 using area model.

Let's first of all break the numbers into tens and ones respectively.

27 x 45 = (20 + 7) x (40 + 5)

Secondly, let's interpret the expression. (20 + 7) x (40 + 5)

The expression shows that, one side length of the model will be 20 + 7 and the other side length will be 40 + 5

Finally, let's draw a model to show this.

	40	5
20		
7		

2. Find the product of 31 x 12 using the area model method.

Let's first of all multiply the side lengths to get the area of each section.

	10	2
30	300	60
1	10	2

Now, let's add all the figures in each section to get the area of the whole model.

300 + 60 + 10 + 2 = 372

So, 31 x 12 = 372

4. Represent 49 x 17 using area model.

	10	7
40		
9		

5. Find the product of 33 x 94 using the area model method.

Let's first of all multiply the side lengths to get the area of each section.

	90	4
30	2700	120
3	270	12

Now, let's add all the figures in each section to get the area of the whole model.

2,700 + 270 + 120 + 12 = 3,102

So, 33 x 94 = 3,102