Multiply in Parts

Multiply 3 × 46

Break 46 into two parts: 40 and 6.

Then multiply those two parts separately by 3: 3 × 40 is 120, and 3 × 6 is 18.

Then add these two partial results: 120 + 18 = 138.

Here is another way of showing the same thing, using bundles of ten.

<table>
<thead>
<tr>
<th>46</th>
<th>46</th>
<th>46</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 × 40 = 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 × 6 = 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ 1 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 3 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Study these examples. Multiply the tens and ones separately:

- **8 × 13**
  - (10 + 3)
  - 8 × 10 and 8 × 3
  - 80 and 24
  - = 104

- **5 × 24**
  - (20 + 4)
  - 5 × 20 and 5 × 4
  - 100 and 20
  - = 120

- **7 × 68**
  - (60 + 8)
  - 7 × 60 and 7 × 8
  - 420 and 56
  - = 476

1. Multiply the tens and ones separately. Then add to get the final answer.

- **a. 6 × 27**
  - (20 + 7)
  - 6 × ____ and 6 × __
  - ____ and ____
  - = ____

- **b. 5 × 83**
  - (____)
  - 5 × ____ and 5 × __
  - ____ and ____
  - = ____

- **c. 9 × 34**
  - (____)
  - 9 × ____ and 9 × __
  - ____ and ____
  - = ____