

Mysterious Multiplication 2

Ask students to calculate 27×23 . Then 37×33 , 42×48 , and 56×54 .

Ask students what pattern they may have noticed.

[When students realize that the same pattern found in Mysterious Multiplication 1 also works with these numbers, ask them to find other number combinations for which the pattern works.]

Discussion, Suggestions, Possible Solutions

The strategy works as long as the sum of ones digits equals 10 and the tens digits are the same. From the diagram of the rectangle representing the multiplication, you will notice that the one of the regions made up of ten-blocks can be moved below the other two parts. Since the sum of ones digits is 10, that will make the dimension of this large rectangle 10 longer, increasing the tens digit by one.