

Multiply by 9: Strategies

Solve the 9s times tables below.

$9 \times 1 = \underline{\quad} \quad 9 \times 4 = \underline{\quad} \quad 9 \times 7 = \underline{\quad} \quad 9 \times 10 = \underline{\quad}$

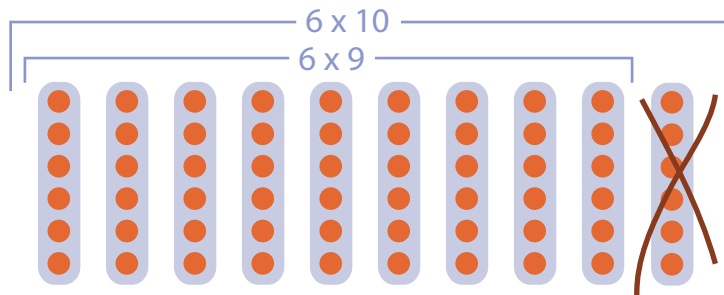
$9 \times 2 = \underline{\quad} \quad 9 \times 5 = \underline{\quad} \quad 9 \times 8 = \underline{\quad} \quad 9 \times 11 = \underline{\quad}$

$9 \times 3 = \underline{\quad} \quad 9 \times 6 = \underline{\quad} \quad 9 \times 9 = \underline{\quad} \quad 9 \times 12 = \underline{\quad}$

Do you notice anything interesting about the products of all of the 9s tables?
You may have noticed that all the digits of each product add up to equal 9!

There are many different strategies for solving 9s tables. One strategy that many students find helpful is to multiply by 10 first...

$$6 \times 9 \rightarrow (6 \times 10) - 6 \rightarrow 60 - 6 = \textcircled{54}$$



Try this strategy!

$7 \times 9 = \underline{\quad} \quad 9 \times 9 = \underline{\quad} \quad 4 \times 9 = \underline{\quad} \quad 8 \times 9 = \underline{\quad} \quad 3 \times 9 = \underline{\quad}$