

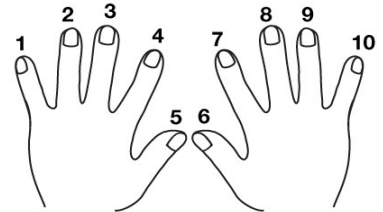
# The Nines Trick

Multiply any number by nine using this trick. Here's how....

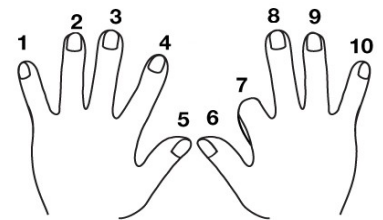
Let's say you wanted to multiply  $9 \times 7$ .

**Step 1:** Hold up all 10 of your fingers.

Imagine they're numbered 1 through 10, as you see in the picture.



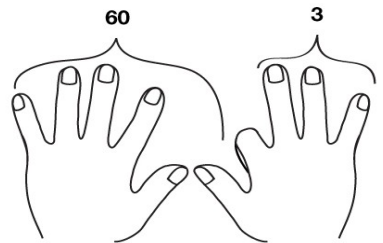
**Step 2:** Since you're multiplying  $9 \times 7$ , you fold down the seventh finger, like this.



**Step 3:** Count the number of fingers to the left of the folded finger (6).

Count the number of fingers to the right of the folded finger (3).

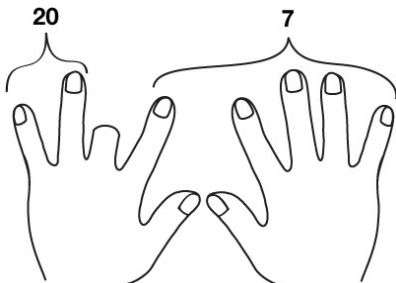
Your answer is 63.



$$9 \times 7 = 63$$

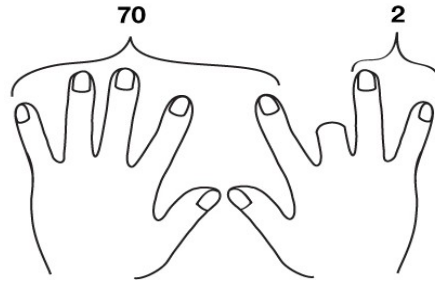
**Remember:** Whatever number you want to multiply by nine, that's the finger you fold down.

If you wanted to multiply  $9 \times 3$ , your fingers would look like this:



$$9 \times 3 = 27$$

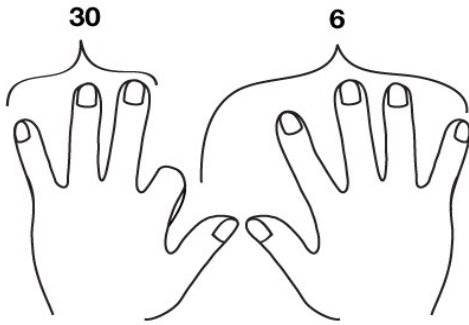
If you wanted to multiply  $9 \times 8$ , your fingers would look like this:



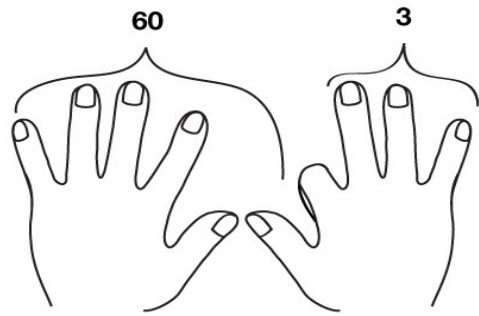
$$9 \times 8 = 72$$

# The Nines Trick

Tell which multiplication fact is show by the fingers in these pictures. Write the multiplication fact and the answer.



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

Use the nines trick to solve these multiplication facts.

$9 \times 8 = \underline{\quad}$

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

$5 \times 9 = \underline{\quad}$

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

$9 \times 9 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$4 \times 9 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

Can you use the nines trick to solve  $6 \times 7$ ? Explain.

---



---

Can you use the nines trick to solve  $12 \times 9$ ? Explain.

---



---

# Another Nines Trick

**Step 1: Make a column of numbers on your paper from 0 through 9.**

0  
1  
2  
3  
4  
5  
6  
7  
8  
9

**Step 2: Next to your column, you're going to make another column of numbers. This time, count backwards from 9 all the way down to 0.**

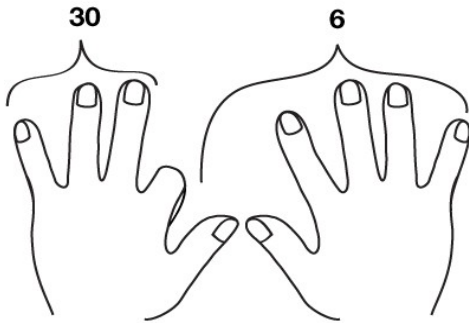
0 9  
1 8  
2 7  
3 6  
4 5  
5 4  
6 3  
7 2  
8 1  
9 0

**Step 3: You've just written all the answers to your nines times tables. Write the facts next to the numbers.**

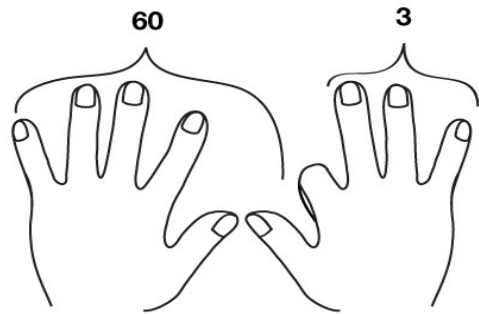
0 9 = 9 x 1  
1 8 = 9 x 2  
2 7 = 9 x 3  
3 6 = 9 x 4  
4 5 = 9 x 5  
5 4 = 9 x 6  
6 3 = 9 x 7  
7 2 = 9 x 8  
8 1 = 9 x 9  
9 0 = 9 x 10

# The Nines Trick - ANSWER KEY

Tell which multiplication fact is shown by the fingers in these pictures. Write the multiplication fact and the answer.



$$9 \times 4 = 36$$



$$9 \times 7 = 63$$

Use the nines trick to solve these multiplication facts.

$$9 \times 8 = 72$$

$$9 \times 3 = 27$$

$$5 \times 9 = 45$$

$$6 \times 9 = 54$$

$$9 \times 9 = 81$$

$$9 \times 2 = 18$$

$$4 \times 9 = 36$$

$$9 \times 7 = 63$$

Can you use the nines trick to solve  $6 \times 7$ ? Explain.

**No. You can only use the nines trick when multiplying by 9.**

Can you use the nines trick to solve  $12 \times 9$ ? Explain.

**No. The nines trick only works up to  $9 \times 10$ . You don't have enough fingers to make it work up to  $9 \times 12$ .**