

Multiplication RULES

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Rule Number 0: Anything times zero is zero:

$$\begin{array}{ll} 0*0 = 0 & 5*0 = 0 \\ 1*0 = 0 & 6*0 = 0 \\ 2*0 = 0 & 7*0 = 0 \\ 3*0 = 0 & 8*0 = 0 \\ 4*0 = 0 & 9*0 = 0 \\ & 10*0 = 0 \end{array}$$

Rule Number 1: Anything times one is itself

$$\begin{array}{ll} 0*1 = 0 & 5*1 = 5 \\ 1*1 = 1 & 6*1 = 6 \\ 2*1 = 2 & 7*1 = 7 \\ 3*1 = 3 & 8*1 = 8 \\ 4*1 = 4 & 9*1 = 9 \\ & 10*1 = 10 \end{array}$$

Rule Number 5: Anything times five ends with a zero or five in the ones place. If the number you are multiplying by is even there is a zero in the ones place and if it is odd there is a five in the ones place

$$\begin{array}{ll} 0*5 = 0 & 5*5 = 25 \\ 1*5 = 5 & 6*5 = 30 \\ 2*5 = 10 & 7*5 = 35 \\ 3*5 = 15 & 8*5 = 40 \\ 4*5 = 20 & 9*5 = 45 \\ & 10*5 = 50 \end{array}$$

Rule Number 9: Here are several tricks with the 9s. Hold out your hands in front of you, palms out. Now count from the left the number that you are multiplying nine by and put that finger down. To the left of that finger is your tens place and to the right is your ones.

$9*1 = 9$	No fingers to the left, and nine to the right
$9*2=18$	One finger to the left, and eight to the right
$9*3=27$	Two fingers to the left and seven to the right
$9*4=36$	Three fingers to the left and six to the right
$9*5=45$	Four fingers to the left and five to the right
$9*6=54$	Five fingers to the left and four to the right
$9*7=63$	Six fingers to the left and three to the right
$9*8=72$	Seven fingers to the left and two to the right
$9*9=81$	Eight fingers to the left and one to the right

If you look at the nine table you see a pattern: The tens place is counting up and the ones place is counting down.

$1*9 = 09$
$2*9 = 18$
$3*9 = 27$
$4*9 = 36$
$5*9 = 45$
$6*9 = 54$
$7*9 = 63$
$8*9 = 72$
$9*9 = 81$
$10*9 = 90$

There are two more tricks with the nines. If you add up the two digits of the product (answer) you get nine. Lastly, if you take the number that is times by nine and subtract one you get the number in the tens place. Then all you have to do is take the number in the tens place and figure out what you have to add to it to get nine and you have the number in the ones place.

Rule Number Ten: Anything times ten has the number in the tens place and a zero in the ones:

$1*10 = 10$	$6*10 = 60$
$2*10 = 20$	$7*10 = 70$
$3*10 = 30$	$8*10 = 80$
$4*10 = 40$	$9*10 = 90$
$5*10 = 50$	$10*10 = 100$

Rule Even: Anything times an even number is even.