

Using Decimal Numbers

Number Value:	1	3	2	9
Place Value:	thousand's	hundred's	ten's	one's
Digit Index:	10^3	10^2	10^1	10^0

Number Value:	1	0	.	2	9
Place Value:	ten's	one's		tenth's	hundredth's
Digit Index:	10^1	10^0		10^{-1}	10^{-2}

Figure 1: Table

The method (Decimal * Number)

Method One. The most effective method.

We want

$$1.8 * 8$$

Ignore the decimal point for now

$$18 * 8 = 144$$

Then because there is a number 8 in the tenth's place, you will move one decimal place to the left

$$144 = 14.4(\text{answer})$$

Method Two. The monkey effective method.

We want

$$3.212 * 25$$

We know that

$$25 = 10 + 10 + 5$$

Then, using distributon -> $3.212(10 + 10 + 5)$

$$\text{Step one: } 3.212 * 10 = 32.12$$

$$\text{Step two: } 3.212 * 10 = 32.12$$

$$\text{Step three: } 3.212 * 5 = 16.060$$

We add all of them

$$32.12 + 32.12 + 16.06 = 80.3(\text{answer})$$

Examples

1. $1.8 * 23 = 18 * 23 = 41.4$
2. $5.59 * 10 = 55.9$
3. $5.59 * 100 = 559$