To Multiply Numbers with Decimals
Line Up Numbers All the Way to the Right
(As if the Decimals Were Not There)

Teach Grow Sow

1.20x4.25

Place the longer number on top.

Get rid of pointless zeros.

4.250
x1.2

850
+4,250

5.100

Count how many "hops" from the decimal to the right.

Count again.

Remember to place a zero on the second line.

2 hops + 1 hop = 3 hops. Place the decimal the same number of hops from right to left.

Decimal "of" # means to multiply the decimal by the #.

0.25 of 0.5

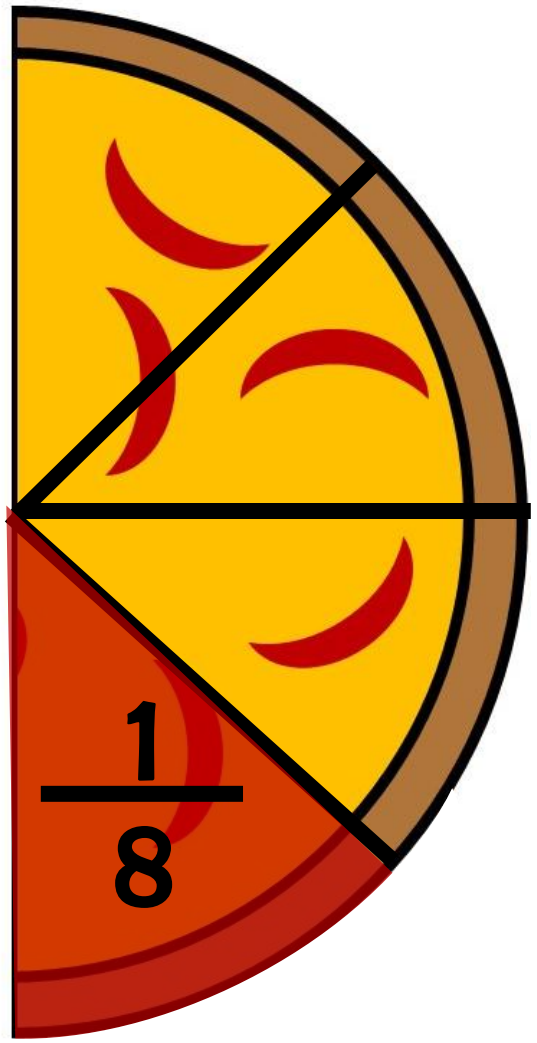
$$\begin{array}{r} 0.25 \\ \times 0.5 \\ \hline 0.125 \end{array}$$

$$=$$

$$\frac{1}{4}\left(\frac{25}{100}\right) \text{ of } \frac{1}{2}\left(\frac{50}{100}\right)$$

$$=$$

25% of 50%



If multiplying a #>1 by a #>1 the answer will be a #>1.

$$\begin{array}{r} 1.25 \\ \times 1.5 \\ \hline 625 \\ +1250 \\ \hline 1.875 \end{array}$$

If multiplying a #<1 by a #<1 the answer will be a #<1.

$$\begin{array}{r} 0.25 \\ \times 0.5 \\ \hline 0.125 \end{array}$$

If multiplying a #<1 by a #>1 the answer could either be a #<1 or a #>1.

$$\begin{array}{r} 1.25 \\ \times 0.5 \\ \hline 0.625 \end{array}$$

$$\begin{array}{r} 5.25 \\ \times 0.5 \\ \hline 2.625 \end{array}$$

Multiplying and Dividing by Tens

Teach Grow Sow

$\times \frac{1}{10} = \div 10$

$\times 0.1 = \div 10$

$\times \frac{1}{100} = \div 100$

$\times 0.01 = \div 100$