

# Multiplying Decimals (Harder Example)

$$87 \times 0.05$$

First, multiply 0.05 by one hundred so that we are only dealing with whole numbers

$$0.05 \times 100 = 5$$

Next,  
work out  $87 \times 5$

$$87 \times 5 = 435$$

$$\begin{array}{r} 3 \\ 87 \\ \times 5 \\ \hline 435 \end{array}$$

We have to undo what we did in the first step

So we must divide our answer by 100

$$435 \div 100 = 4.35$$

$$87 \times 0.05 = 4.35$$

$$3.2 \times 0.28$$

First, multiply 3.2 and 0.28 so that we are only dealing with whole numbers

$$3.2 \times 10 = 32$$

$$0.28 \times 100 = 28$$

Next,  
work out  $32 \times 28$

$$32 \times 28 = 896$$

$$\begin{array}{r} 1 \\ 32 \\ \times 28 \\ \hline 256 \\ 640 \\ \hline 896 \end{array}$$

We have to undo what we did in the first step

So we must divide our answer by 10 and 100

$$896 \div 10 = 89.6$$

$$89.6 \div 100 = 0.896$$

$$3.2 \times 0.28 = 0.896$$