

How do you divide decimals?

Example

$$6.87 \div 0.3$$

Step 1 - Change the decimals to whole numbers? $687 \div 3$

Step 2 - Find the quotient using long division $3 \overline{)687}$

Step 3 - Estimate the quotient by rounding the dividend and the divisor to the nearest whole number or benchmark fraction/decimal. ($\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$). $6.87 \approx 7$ and $0.3 \approx 0.5$

$$7 \div 0.5 = 3.5$$

Step 4 - Insert a decimal into the quotient in step 1 that is closest to the estimate in step 3.

2.29 is the closest decimal to 3.5. Therefore $6.87 \div 0.3 = 2.29$