

Dividing Decimals - Algorithm

$$\text{DIVISOR} \rightarrow 2 \quad \overline{) \begin{array}{r} 4 \leftarrow \text{Quotient} \\ 8 \leftarrow \text{Dividend} \end{array}}$$

NUMBER 1 RULE: Divisor has to be a whole number (decimal is on the right)

★ If your divisor is not a whole number, shift your decimal one place value at a time until it is.

ex. $1.27 = 127.$

★ If you shift your divisor then you must shift your dividend the same amount

example:

$$\begin{array}{r} 2 \overline{) 3.74} \rightarrow 2 \overline{) 37.4} \\ \underline{-2} \quad \quad \quad \underline{-2} \\ 17 \quad \quad \quad 17 \\ \underline{-16} \quad \quad \quad \underline{-16} \\ 14 \quad \quad \quad 14 \\ \underline{-14} \quad \quad \quad \underline{-14} \\ 0 \quad \quad \quad 0 \end{array}$$

★ Bring decimal straight up & divide normally.