

Decimals

→ Multiplication of Decimals

① $0.3 \times 0.2 \rightarrow 0.06$

② $0.25 \times 0.8 = 0.200$
 $= 0.2$

① First multiply the numbers, irrespective of decimal place.

② Count the decimal places in the equation

③ That is the amount of decimal places you should have

③ $0.5 \times 3.25 = 1.625$

④ $0.65 \times 25 = 16.25$

⑤ $3.5 \times 0.5 = 1.75$

⑥ $0.16 \times 0.8 = 0.128$

⑦ $1.25 \times 4 = 5$

→ Addition and Subtraction (Align the decimal)

① $3.25 + 6.8 \rightarrow$

$$\begin{array}{r} 3.25 \\ 6.8 \\ \hline 10.05 \end{array}$$

② $15.2 + 527.64$

$$\begin{array}{r} 15.2 \\ + 527.64 \\ \hline 542.84 \end{array}$$

$$\textcircled{3} 72.8 - 5.47 \rightarrow \begin{array}{r} 72.80 \\ - 5.47 \\ \hline 67.33 \end{array}$$

→ Fractions to Decimals

$$\frac{1}{4} = 0.25$$

$$\begin{array}{r} \text{R.w} \\ 4 \overline{) 0.25} \\ \underline{4} \\ \downarrow \\ 10 \\ \underline{- 8} \\ 20 \\ \underline{- 20} \\ 0 \end{array}$$

$$\textcircled{2} \frac{1}{8} = 0.125$$

$$\begin{array}{r} 0.125 \\ 8 \overline{) 10} \\ \underline{- 8} \\ 20 \\ \underline{- 16} \\ 40 \\ \underline{- 40} \\ 0 \end{array}$$

→ Decimal to Fractions

$$\textcircled{1} \frac{0.25 \times 100}{100} \Rightarrow \frac{25}{100} = \boxed{\frac{1}{4}}$$

① Multiply the decimal with the number of non zero values after the decimal

② Then write the same number in the denominator and simplify

$$\textcircled{2} \sqrt{1.44} = \sqrt{\frac{144}{100}} = \frac{12}{10} = \boxed{\frac{6}{5}}$$

$$\textcircled{3} \frac{1.28}{0.2} \times \frac{100}{100} \rightarrow \frac{128}{20} = \boxed{\frac{32}{5}}$$