

08/11/21  
C.4

# Division of Decimal By Whole

Example: Divide 0.406 by 29

$$0.406 \div 29 = \frac{406}{1000} \times \frac{1}{29} = 0.014$$

OR

$$\begin{array}{r} 0.014 \\ \hline 29 \overline{) 0.406} \\ \underline{0.4} \phantom{0} \\ 0 \phantom{0} \phantom{0} \\ \underline{40} \phantom{0} \\ 29 \phantom{0} \\ \hline 116 \\ \underline{116} \\ 0 \end{array}$$

Division of Decimal By Decimal  
Divide 0.8432 by 0.8

$$0.8432 \div 0.8 = \frac{8432}{10000} \div \frac{8}{10}$$

$$\frac{1054}{\cancel{8432}} \times \frac{10}{\cancel{8}} = \frac{1054}{1000}$$

$$= 1.054$$

Exercise 10 F

1. Divide

b. 24.9 by 300

$$= 0.083$$

$$\begin{array}{r} 0.083 \\ 300 \overline{) 24.9} \\ \underline{0} \downarrow \\ 24 \ 9 \\ \underline{0} \\ 2490 \\ \underline{2400} \\ 900 \\ \underline{900} \\ 0 \end{array}$$

c. 147.2 by 230

$$\begin{array}{r}
 0.64 \\
 \hline
 230 \overline{) 147.2} \\
 \underline{0} \quad \downarrow \\
 1472 \\
 \underline{1380} \\
 920 \\
 \underline{920} \\
 0
 \end{array}$$

d. 650.3 by 7000

$$\begin{array}{r}
 0.0929 \\
 \hline
 7000 \overline{) 650.3} \\
 \underline{0} \\
 6503 \\
 \underline{0} \\
 65030 \\
 \underline{63000} \\
 20300 \\
 \underline{14000} \\
 63000 \\
 \underline{63000} \\
 0
 \end{array}$$

e. 17.4 by 2000

$$\begin{array}{r} 0.0087 \\ 2000 \overline{) 17.4} \\ \underline{0} \\ 174 \end{array}$$

$$= 0.0087 \overline{) 1740}$$

$$\begin{array}{r} 0 \\ \underline{17400} \\ 16000 \\ \underline{14000} \\ 14000 \\ \underline{0} \end{array}$$

f. 108.8 by 8000

$$\begin{array}{r} 0.0136 \\ 8000 \overline{) 108.8} \end{array}$$

$$\begin{array}{r} 0 \downarrow \\ \underline{1088} \end{array}$$

$$= 0.0136$$

$$\begin{array}{r} 0 \\ \underline{10880} \\ 8000 \\ \underline{28800} \\ 24000 \\ \underline{48000} \\ 48000 \\ \underline{0} \end{array}$$

h. 316.96 by 0.028

$$316.96 \div 0.028 = \frac{31696}{100} \div \frac{28}{1000}$$

$$= \frac{31696}{100} \times \frac{1000}{28} = 11320$$