

MONTH : NOVEMBER

SESSION : 3

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 10

CHAPTER NAME : DECIMAL FRACTIONS

**SUB-TOPIC : DIVISION OF DECIMAL FRACTIONS BY A WHOLE NUMBER
AND DECIMAL. EXERCISE 10 F**

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Enable the students

- **To divide decimal fractions by 10,100,1000 etc.**
- **To divide decimal fractions by a whole number and by a decimal fractions**

DIVISION OF DECIMAL BY WHOLE NUMBER

Example: Divide 0.406 by 29

$$0.406 \div 29 = \frac{14}{\cancel{406}} \times \frac{1}{\cancel{29}} = 0.014$$

Or

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

**DIVISION OF
DECIMALS**

DIVISION OF DECIMAL BY WHOLE NUMBER

Example: Divide 82.25 by 5

$$82.25 \div 5 = \frac{8225}{100} \times \frac{1}{5} = 16.45$$

DIVISION OF DECIMAL BY DECIMAL

Divide 0.8432 by 0.8

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

$$\frac{\begin{array}{r} 1054 \\ \cancel{8432} \\ \hline 10000 \end{array}}{\cancel{10000}} \times \frac{\begin{array}{r} \cancel{10} \\ \hline \cancel{8} \end{array}}{\cancel{8}} = \frac{1054}{1000}$$

$$= 1.054$$

EXERCISE 10 F

I. Divide

a. 0.406 by 29

$$0.406 \div 29 = \frac{\overset{14}{\cancel{406}}}{1000} \times \frac{\overset{1}{\cancel{29}}}{1} = \mathbf{0.014}$$

b. 24.9 by 300

= 0.083

$$\begin{array}{r}
 \mathbf{0.083} \\
 300 \overline{) 24.9} \\
 \underline{0} \\
 249 \\
 \underline{0} \\
 2490 \\
 \underline{2400} \\
 900 \\
 \underline{900} \\
 0
 \end{array}$$

EXERCISE 10 F

I. Divide

c. 147.2 by 230

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

The quotient is 0.64. The decimal point in the quotient is aligned with the decimal point in the dividend. A downward arrow points from the decimal point in the dividend to the decimal point in the quotient.

EXERCISE 10 F

I. Divide

d. 650.3 by 7000

= 0.0929

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

EXERCISE 10 F

I. Divide

e. 17.4 by 2000

= 0.0087

$$\begin{array}{r} 0.0087 \\ 2000 \overline{) 17.4} \\ \underline{0} \\ 174 \\ \underline{0.} \\ 1740 \\ \underline{0} \\ 17400 \\ \underline{16000} \\ 14000 \\ \underline{14000} \\ 0 \end{array}$$

EXERCISE 10 F

I. Divide

f. 108.8 by 8000

= 0.0136

$$\begin{array}{r} 8000 \overline{) 108.8} \\ \underline{0} \\ 1088 \\ \underline{0.} \\ 10880 \\ \underline{8000} \\ 28800 \\ \underline{24000} \\ 48000 \\ \underline{48000} \\ 0 \end{array}$$

EXERCISE 10 F

I. Divide

g. 0.8432 by 0.8

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

$$\frac{\begin{array}{r} 1054 \\ \cancel{8432} \\ \hline 10000 \end{array}}{\cancel{10000}} \times \frac{\cancel{10}}{\cancel{8}} = \frac{1054}{1000}$$

$$= 1.054$$

EXERCISE 10 F

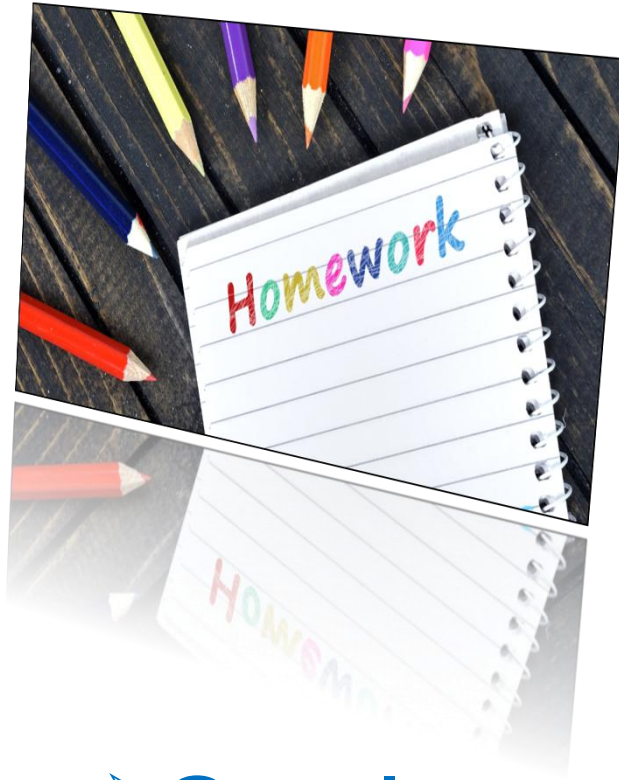
I. Divide

h. 316.96 by 0.028

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

1132

$$\begin{array}{r} \cancel{7924} \\ \cancel{31696} \\ \hline \cancel{100} \end{array} \times \begin{array}{r} \cancel{1000} \\ \cancel{28} \\ \cancel{7} \end{array} = 11320$$



➤ **Complete exercise 10 F in the note book.**



Learning Outcomes

Students are able to divide decimal fractions by 10, 100, 1000 and whole number.

THANKING YOU
ODM EDUCATIONAL GROUP