



**MONTH : SEPTEMBER**

**SESSION : 11**

**CLASS : V**

**SUBJECT : MATHEMATICS**

**CHAPTER NUMBER: 10**

**CHAPTER NAME : DECIMAL FRACTIONS**

**SUB-TOPIC : CONVERSION OF DECIMAL FRACTIONS INTO COMMON  
FRACTION AND VICE VERSA**

**EXERCISE 10 A Q.NO. 10 & 11**

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**CHANGING YOUR TOMORROW**

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## **LEARNING OBJECTIVE :**

**Enable the students**

- **To convert the decimal fractions into common fractions**
- **To convert common fractions into decimal fractions**

# CONVERSION OF DECIMAL FRACTIONS INTO COMMON FRACTION

Decimal To  
Fraction  
Conversion

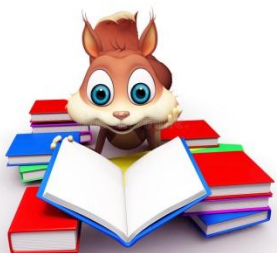
CONVERSION

EXAMPLE: 1

$$\text{a. } 2.04 = \frac{204}{100} \xrightarrow{\text{Lowest term}} = \frac{51}{25} = 2 \frac{1}{25}$$

OR

$$\text{b. } 2.04 = 2 \frac{4}{100} = 2 \frac{1}{25}$$



# CONVERSION OF DECIMAL FRACTIONS INTO COMMON FRACTION

Decimal To  
Fraction  
Conversion

CONVERSION

EXAMPLE: 2

$$\text{a. } 14.235 = \frac{14235}{1000} \xrightarrow{\text{Lowest term}} = \frac{2847}{200} = 14\frac{47}{200}$$

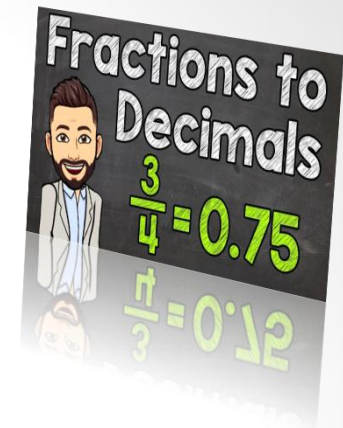
OR

$$\text{b. } 14.235 = 14 + \frac{235}{1000} = 14\frac{47}{200}$$



# CONVERSION OF COMMON FRACTIONS INTO DECIMAL FRACTION

## DECIMAL FRACTION

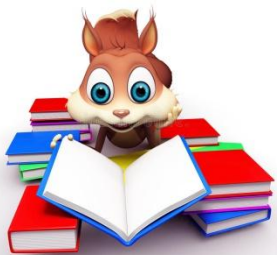


### EXAMPLE: 1

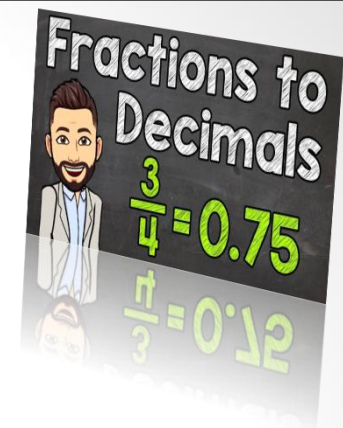
$$\text{a. } \frac{3}{8} = \frac{3 \times 125}{8 \times 125} = \frac{375}{1000} = 0.375$$

Change the denominator to a multiple of 10.

Then convert the fraction to decimal.



# CONVERSION OF COMMON FRACTIONS INTO DECIMAL FRACTION



DECIMAL FRACTION

OR

$$\begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{24} \phantom{00} \\ 60 \phantom{0} \\ \underline{56} \phantom{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

1. Divide the numerator by the denominator.
2. When **DIVIDEND** is smaller , put a decimal **point** in the dividend and quotient followed by **zero** to the **right of the decimal point**.
3. Keep dividing till the remainder is **0**

$$\frac{3}{8} = .375$$



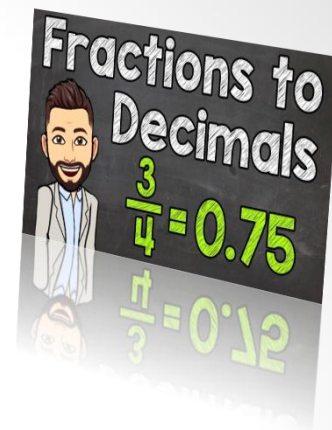
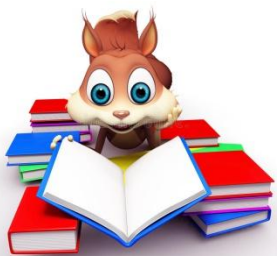
# CONVERSION OF COMMON FRACTIONS INTO DECIMAL FRACTION

## EXAMPLE: 2

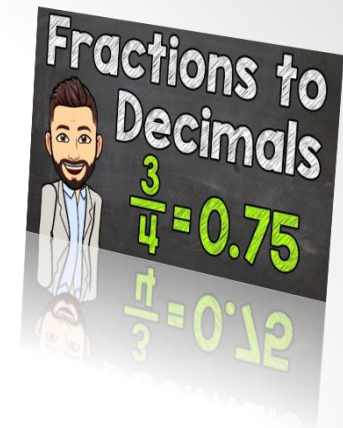
$$\text{a. } \frac{23}{4} = \frac{23 \times 25}{4 \times 25} = \frac{575}{100} = 5.75$$

OR

$$\begin{array}{r} 5.75 \\ 4 \overline{) 23.00} \\ \underline{20} \phantom{00} \\ 30 \phantom{0} \\ \underline{28} \phantom{0} \\ 20 \phantom{0} \\ \underline{20} \phantom{0} \\ 0 \end{array}$$



## EXERCISE 10 –A



### 10. Convert the common fractions into decimal fractions

$$\text{a } \frac{3}{4} = \frac{3 \times 25}{4 \times 25} = \frac{75}{100} = 0.75$$

$$\text{b } \frac{7}{8} = \frac{7 \times 125}{8 \times 125} = \frac{875}{1000} = 0.875$$

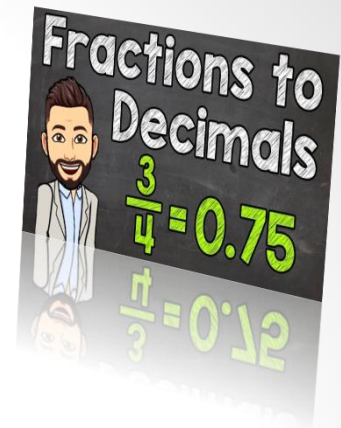
$$\text{c } 15 \frac{1}{4} = \frac{61}{4} = \frac{61 \times 25}{4 \times 25} = \frac{1525}{100} = 15.25$$

$$\text{d. } 20 \frac{3}{5} = \frac{103}{5} = \frac{103 \times 2}{5 \times 2} = \frac{206}{10} = 20.6$$





# EXERCISE 10 -A



10. Convert the common fractions into decimal fractions

e.  $17 \frac{3}{16} = \frac{275}{16}$

$$\begin{array}{r}
 17.1875 \\
 \hline
 16 \overline{) 275.0000} \\
 \underline{16} \phantom{0000} \\
 115 \phantom{000} \\
 \underline{112} \phantom{00} \\
 30 \phantom{00} \\
 \underline{16} \phantom{00} \\
 140 \phantom{0} \\
 \underline{128} \phantom{0} \\
 120 \\
 \underline{112} \\
 80 \\
 \underline{80} \\
 0
 \end{array}$$

$17 \frac{3}{16} = 17.1875$

f.  $8 \frac{21}{40} = \frac{341}{40} = \frac{341 \times 25}{40 \times 25} = \frac{8525}{1000} = 8.525$



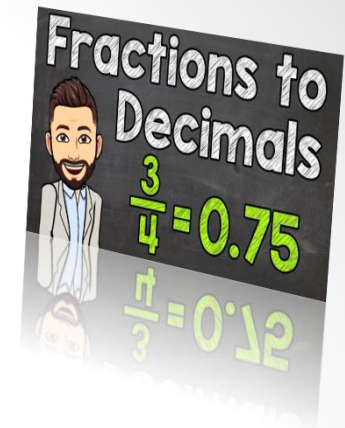
# EXERCISE 10 -A

10. Convert the common fractions into decimal fractions

$$g. \quad 58 \frac{5}{64} = \frac{3717}{64}$$

$$58 \frac{5}{64} = 58.078125$$

$$\begin{array}{r} 58.078125 \\ 64 \overline{) 3717.000000} \\ \underline{320} \phantom{000000} \\ 517 \phantom{000000} \\ \underline{512} \phantom{000000} \\ 50 \phantom{000000} \\ \underline{0} \phantom{000000} \\ 500 \phantom{00000} \\ \underline{448} \phantom{00000} \\ 520 \phantom{00000} \\ \underline{512} \phantom{00000} \\ 80 \phantom{00000} \\ \underline{64} \phantom{00000} \\ 160 \phantom{00000} \\ \underline{128} \phantom{00000} \\ 320 \phantom{00000} \\ \underline{320} \phantom{00000} \\ 0 \end{array}$$



## EXERCISE 10 -A

Decimal To  
Fraction  
Conversion

CONVERSION  
FRACTION

11. Convert the decimal fractions into common fraction

$$\text{a. } 0.02 = \frac{2}{100} = \frac{1}{50}$$

$$\text{b. } 0.175 = \frac{175}{1000} = \frac{7}{40}$$

$$\text{c. } 7.60 = 7 + \frac{60}{100} = 7 \frac{3}{5}$$

$$\text{d. } 7.625 = 7 + \frac{625}{1000} = 7 + \frac{25}{40} = 7 \frac{5}{8}$$



## EXERCISE 10 -A

Decimal To  
Fraction  
Conversion

CONVERSION  
FRACTION

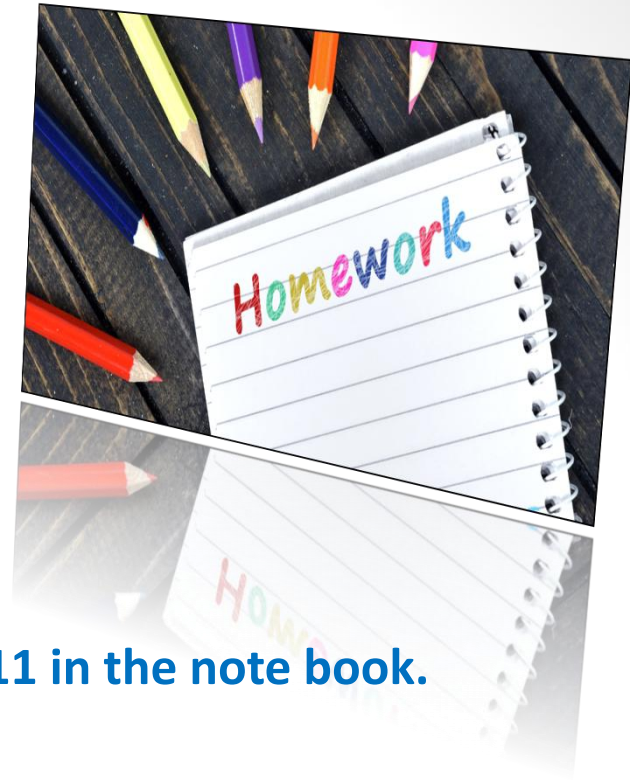
**11. Convert the decimal fractions into common fraction**

$$\text{e. } 6.125 = 6 + \frac{125}{1000} = 6 \frac{1}{8}$$

$$\text{f. } 3.75 = 3 + \frac{75}{100} = 3 \frac{3}{4}$$

$$\text{g. } 9.55 = 9 + \frac{55}{100} = 9 \frac{11}{20}$$





- Complete exercise 10 A q.no. 10 & 11 in the note book.



# Learning Outcomes

**Students are able to convert decimal to fractions and vice versa .**

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**