

NANUKU SANGAM SCHOOL
MATHEMATICS YEAR 7

STRAND – MEASUREMENT

SUB – STRAND: Changing Fractions to Decimals

CLO: Express fractions involving tenths, hundredths and thousands as decimals.

Changing Fractions to Decimals

Proper fraction to decimal	Improper fraction to decimal	Repeating or recurring fraction
<div style="display: flex; justify-content: space-between;"> <div style="text-align: right;"> $\begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{-24} \\ 60 \\ \underline{-56} \\ 40 \\ \underline{-40} \\ 0 \end{array}$ </div> <div> $\frac{3}{8} \rightarrow$ Dividend $\frac{8}{8} \rightarrow$ Divisor $\frac{3}{8} =$ </div> </div>	$\frac{7}{5} \rightarrow 5 \overline{) 7.0}$ $\frac{1.4}{10} = 1 \frac{4}{10} = 1 \frac{2}{5}$	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> $\begin{array}{r} .3 \\ 3 \overline{) 1.0} \\ \underline{-9} \\ 1 \end{array}$ </div> <div style="text-align: center;"> $\begin{array}{r} .33 \\ 3 \overline{) 1.00} \\ \underline{-9} \\ 10 \\ \underline{-9} \\ 1 \end{array}$ </div> <div style="text-align: center;"> $\begin{array}{r} .333 \\ 3 \overline{) 1.000} \\ \underline{-9} \\ 10 \\ \underline{-9} \\ 10 \\ \underline{-9} \\ 1 \end{array}$ </div> </div>
<p>A terminating decimal comes to a definite end. It has a definite number of decimal places.</p> <p>A repeating or recurring decimal does not come to an end, but forms pattern that is repeated indefinitely.</p>		

QUESTIONS

1. Write each as a decimal.

a) $\frac{4}{5} = 0.8$	b) $\frac{1}{8} = 0.125$	c) $\frac{3}{7} = 0.43$
d) $\frac{12}{15} = 0.8$	e) $\frac{9}{12} = 0.75$	f) $\frac{20}{25} = 0.8$

2. Write each improper fraction as a decimal

a) $\frac{8}{4} = 2/1$ or 2	b) $\frac{12}{8} = 3/2$	c) $\frac{12}{10} = 6/5$
d) $\frac{20}{12} = 5/3$	d) $\frac{50}{20} = 5/2$	f) $\frac{32}{24} = 4/3$