

Notes 4.2 2/2/18

There are two types of decimals.

Stop	Terminating Dec.	Repeating Dec.
	4.2	$1.\overline{2} = 1.2222\dots$
	55.7963	$\overline{.37373737}$
	6.667	
	0.5	$\frac{2}{11}$ <div style="display: inline-block; vertical-align: middle; margin-left: 20px;"> $\begin{array}{r} 101 \\ 11 \overline{) 2.00} \\ \underline{- 11} \\ 90 \end{array}$ </div>

Terminating or Repeating?

# 1	$\frac{2}{5}$	T	.40	
2	$\frac{1}{4}$	T	0.25	
3	$\frac{3}{8}$	T		
4	$\frac{1}{16}$	T		
5	$\frac{35}{10}$	T		
6	$\frac{2}{3}$	R	$\overline{.6}$	
7	$\frac{8}{99}$	R		
8	$\frac{170}{999}$	R		

Denom. is a multiple of 11. $\overline{.0}$ RO

$$\frac{35}{10} = 10 \overline{) 35.0}$$

$$\underline{- 30} $$

$$50$$

Terminating Decimal \rightarrow Fraction

Repeating Decimal \rightarrow Fraction

$$\overline{.4} \quad \frac{4 \div 2}{10 \div 2} = \frac{2}{5}$$

$$\overline{.32} \quad \frac{32 \div 4}{100 \div 4} = \frac{8}{25}$$

$$2.\overline{7} \quad 2 \frac{7}{10}$$

$$\overline{35.6271}$$