Notes 4.2 2/2/18

There are two types of decimals.

Terminating Dec. | Repeating Dec.

Stop

4.2

55.7963

6.667

0.5

$1.\overline{2} = 1.2222\ldots$

$.\overline{37}$ $\overline{37}$ $\overline{37}$ $\overline{37}$ ...

$\frac{2}{11}$

$11\overline{)2.00}$ 1.1

$-11\downarrow$

90

Terminating or Repeating?

#1 $\frac{2}{5}$ = T .40

2 $\frac{1}{4}$ T 0.25

3 $\frac{3}{8}$ T

4 1/16 T

5 35/10 T

6 2/3 R .6

7 8/99 R

8 170/999 R

$\frac{35}{10}$

$10\overline{)35.0}$ 3.5

$-30\downarrow$

50

-50

0

Denom. is a multiple of 11.

R 0

Terminating Decimal → Fraction

Repeating Decimal → Fraction

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

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

2.7 $\quad 2\frac{7}{10}$

$35.\overline{6271}$