11/3 5.8 Changing Fractions to Decimals

P. 253 $\frac{n}{d} \rightarrow \frac{31}{50}$ ← thirty one out of fifty; thirty one divided by fifty

$$
\begin{array}{r}
.62 \\
50\overline{)31.00} \\
-300 \\
\hline
100 \\
-100 \\
\hline
0
\end{array}
$$

To write a fraction as a decimal, divide the numerator by the denominator!

p. 253 #s 1-4: 2 min.

① 0.5

② 0.8

③ 0.25

④ 0.375

$\frac{3}{8}$ 8 | 3.000

.375

-24

60

-56

40

To Write a Mixed # as a decimal:

① Turn mixed # into an improper fraction

② Divide the fraction

$2\frac{1}{8} = \frac{17}{8}$ (+1, ×8)

$$\begin{array}{r} 2.125 \\ 8\,\overline{)\,17.000} \\ \underline{-16} \\ 10 \\ \underline{-8} \\ 20 \\ \underline{-16} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

→ 2.125

Terminating Decimal

– ends up with no remainder

Repeating Decimal

$1\frac{1}{6} = \frac{7}{6}$

$1\frac{5}{33} = \frac{38}{33}$

$1.1\overline{515}$

$33\overline{)38.000}$

-33

50

-33

170

-165

50

$1.\overline{15}$

$1.1\overline{66}$

$6\overline{)7.000}$

-6

10

-6

40

-36

40

$1.1\overline{6}$

p. 254 #s 5-8: 3 min.

⑤ 5.4 $3\frac{5}{8} = \frac{29}{8}$

⑥ 3.625

$$
\begin{array}{r}
3.625 \\
8\overline{)29.00} \\
-24 \\
\hline
50 \\
-48 \\
\hline
20 \\
-16 \\
\hline
40
\end{array}
$$

⑦ $0.\overline{6}$

⑧ $3.\overline{18}$

In Class:

p. 255 #s 1-12 &
18-21

HW: WS p. 73
#s 1-24 ALL