21.9.21 Tuesday

Date
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Exercise - 10(A)

10. Convert the following common fractions into decimal fractions.

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

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

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

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

e. $17\frac{3}{16} = \frac{275}{16} = 17.1875$

$$
\begin{array}{r|l}
 & 17.1875 \\
16 & 275.000 \\
 & 16\downarrow \\
\hline
 & 115 \\
 & 112\downarrow \\
\hline
 & 30 \\
 & 16 \\
\hline
 & 140 \\
 & 128 \\
\hline
 & 120 \\
 & 112 \\
\hline
 & 8
\end{array}
$$

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

g. $58\frac{5}{64} = \frac{3712}{64}$ ~~0.078125~~ 58.078125

$$
\begin{array}{r|l}
 & 0.078125 \\
64 & 5.000000 \\
 & 0 \\
\hline
 & 500 \\
 & 448 \\
\hline
 & 520 \\
 & 512 \\
\hline
 & 80 \\
 & 64 \\
\hline
 & 160 \\
 & 128 \\
\hline
 & 320 \\
 & 320 \\
\hline
 & 0
\end{array}
$$

$58 + 0.078125 = 58.078125$

11. Convert the following decimal fractions into common fractions.

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

2. $0.175 = \frac{175}{1000} = \frac{7}{40}$

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

4. $7.625 = 7 + \frac{625}{1000} = 7 + \frac{25}{40} = 7\frac{5}{8}$

5. $6.125 = 6 + \frac{125}{1000} = 6 + \frac{25}{200} = 6\frac{5}{40} = 6\frac{1}{8}$

6. $3.75 = 3 + \frac{75}{100} = 3 + \frac{15}{20} = 3\frac{3}{4}$

7. $9.55 = 9 + \frac{55}{100} = 9\frac{11}{20}$