5. Convert the following improper fractions into mixed fractions.

(a) $\frac{21}{6} = 21 \div 6$

$= 3\ 3\frac{3}{6}$

$$\begin{array}{r} 3 \\ 6\overline{)21} \\ -18 \\ \hline 3 \end{array}$$

(a) $\frac{21}{6} = \frac{3\times6+3}{6} \quad \frac{6\times3+3}{6}$

$= 3\frac{3}{6}$

(b) $\frac{112}{6} = \frac{6\times6+18}{6} \quad \frac{6\times18+4}{6}$

$= 6\frac{18}{6} \quad 18\frac{4}{6}$

$$\begin{array}{r} 18 \\ 6\overline{)112} \\ -6\downarrow \\ \hline 52 \\ -48 \\ \hline 4 \end{array}$$

(c) $\frac{123}{6} = \frac{6 \times 20 + 3}{6} = 20\frac{3}{6}$

$$\begin{array}{r} 20 \\ 6 \overline{)\,123} \\ -12\downarrow \\ \hline 03 \\ -0 \\ \hline 3 \end{array}$$

(d) $\frac{98}{16} = \frac{16 \times 6 + 2}{16} = 6\frac{2}{16}$

$$\begin{array}{r} 6 \\ 16 \overline{)\,98} \\ -96 \\ \hline 2 \end{array}$$

(e) $\frac{105}{14} = \frac{14 \times 7 + 7}{14} = 7\frac{7}{14}$

$$\begin{array}{r} 7 \\ 14 \overline{)\,105} \\ -98 \\ \hline 7 \end{array}$$

(f) $\frac{223}{18} = \frac{18 \times 12 + 7}{18} = 12\frac{7}{18}$

$$\begin{array}{r} 12 \\ 18 \overline{)\,223} \\ -18\downarrow \\ \hline 43 \\ -36 \\ \hline 7 \end{array}$$

(g) $\frac{445}{15} = \frac{15 \times 29 + 10}{15} = 29\frac{10}{25}$

$$\begin{array}{r} 29 \\ 15 \overline{)\,445} \\ -30\downarrow \\ \hline 145 \\ -135 \\ \hline 10 \end{array}$$

(h) $\frac{614}{24} = \frac{24 \times 25 + 14}{24} = 25\frac{14}{24}$

$$\begin{array}{r|l} & 25 \\ 24 & 614 \\ & -48\downarrow \\ \hline & 134 \\ & -120 \\ \hline & 14 \end{array}$$

(i) $\frac{305}{85} = \frac{85 \times 3 + 50}{85} = 3\frac{50}{85}$

$$\begin{array}{r|l} & 3 \\ 85 & 305 \\ & -255 \\ \hline & 50 \end{array}$$

(j) $\frac{1148}{32} = \frac{32 \times 35 + 28}{32} = 35\frac{28}{85}$

$$\begin{array}{r|l} & 35 \\ 32 & 1148 \\ & -96\downarrow \\ \hline & 188 \\ & -160 \\ \hline & 28 \end{array}$$