Long Division

$\frac{4923}{5} \Rightarrow$

$$\begin{array}{r} 0984 \\ 5\overline{)4923} \\ -0\downarrow \\ \hline 49 \\ -45\downarrow \\ \hline 42 \\ -40 \\ \hline 23 \\ -20 \\ \hline 3 \end{array}$$

STOP

$= 984 + \frac{3}{5}$

$= 984\frac{3}{5}$

$$\begin{array}{r} 0984.6 \\ 5\overline{)4923.0} \\ -0\downarrow \\ \hline 49 \\ -45\downarrow \\ \hline 42 \\ -40 \\ \hline 23 \\ -20 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$$

STOP

$= 984.6$

$\frac{x^2+2x+2}{x+1} \Rightarrow$

$$\begin{array}{r} x+1 \\ x+1\overline{)x^2+2x+2} \\ -(x^2+x)\downarrow \\ \hline 0\quad x+2 \\ -(x+1) \\ \hline 0\quad 1 \end{array}$$

STOP

$= x + 1 + \frac{1}{x+1}$