

9-23-13  
3<sup>rd</sup> Trig

$$\begin{array}{r} 380\frac{1}{3} \\ 3 \overline{) 1141} \\ \underline{- 9} \phantom{0} \phantom{0} \phantom{0} \\ 24 \phantom{0} \phantom{0} \phantom{0} \\ \underline{- 24} \phantom{0} \phantom{0} \phantom{0} \\ 0 \phantom{0} \phantom{0} \phantom{0} \\ \underline{- 0} \\ 0 \end{array}$$

$$\frac{10}{2} = 5$$

$$\begin{array}{r} n+5 \\ n+2 \overline{) n^2+7n+10} \\ \underline{- n^2+2n} \phantom{0} \\ 5n+10 \\ \underline{- 5n+10} \\ 0 \end{array}$$

$$\begin{array}{r} n-8 \\ n+7 \overline{) n^2-n-56} \\ \underline{- n^2+7n} \phantom{0} \\ -8n-56 \\ \underline{- 8n-56} \\ 0 \end{array}$$

$$\begin{array}{r} n-5 \\ n+2 \overline{) n^2-3n-10} \\ \underline{- n^2+2n} \phantom{0} \\ -5n-10 \\ \underline{- 5n-10} \\ 0 \end{array}$$

$$\begin{array}{r} n+2+\frac{2}{n+4} \\ n+4 \overline{) n^2+6n+10} \\ \underline{- n^2+4n} \phantom{0} \\ 2n+10 \\ \underline{- 2n+8} \\ 2 \leftarrow \text{remainder} \end{array}$$

$$n+4 \overline{) n^2 + n + 11}$$

$$\begin{array}{r} n-3 + \frac{23}{n+4} \\ - (n^2 + 4n) \\ \hline -3n + 11 \\ - (-3n - 12) \\ \hline 23 \end{array}$$

$$n-3 \overline{) n^2 + 7n + 7}$$

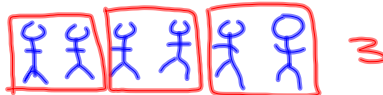
$$\begin{array}{r} n + 10 + \frac{37}{n-3} \\ - (n^2 - 3n) \\ \hline 10n + 7 \\ - (10n - 30) \\ \hline 37 \end{array}$$

$$n-10 \overline{) n^2 + 3n - 1}$$

$$\begin{array}{r} n + 13 + \frac{129}{n-10} \\ - (n^2 - 10n) \\ \hline 13n - 1 \\ - (13n - 130) \\ \hline 129 \end{array}$$

————— ← Can't be zero

$\frac{6}{2}$  ← how much you have  
 ← put in groups of



$\frac{2}{\frac{1}{2}}$  ← only need  $\frac{1}{2}$  to make group



$\frac{2}{0}$  Can't put in groups of zero.



$$\frac{(n+2)(n-4)}{(n-4)} = n+2 \quad [n \neq 4]$$

9-23-13  
4<sup>th</sup> Trig

$$\begin{array}{r} 372\frac{3}{5} \\ 5 \overline{) 1863} \\ \underline{-15} \phantom{0} \phantom{0} \phantom{0} \\ 36 \phantom{0} \phantom{0} \phantom{0} \\ \underline{-35} \phantom{0} \phantom{0} \\ 13 \phantom{0} \phantom{0} \\ \underline{-10} \phantom{0} \\ 3 \end{array}$$

$$\begin{array}{r} n+4 \\ n+2 \overline{) n^2+6n+8} \\ \underline{-n^2+2n} \phantom{0} \\ 4n+8 \\ \underline{-4n+8} \\ 0 \end{array} \quad 2\sqrt{\frac{6}{12}}$$

$$\begin{array}{r} n-4 \\ n+3 \overline{) n^2-n-12} \\ \underline{-n^2+3n} \phantom{0} \\ -4n-12 \\ \underline{-4n-12} \\ 0 \end{array}$$

$$\begin{array}{r} n+4 \\ n-3 \overline{) n^2+n-12} \\ \underline{-n^2-3n} \phantom{0} \\ 4n-12 \\ \underline{4n-12} \\ 0 \end{array}$$

$$\begin{array}{r} n-9+\frac{28}{n+3} \\ n+3 \overline{) n^2-6n+1} \\ \underline{-n^2+3n} \phantom{0} \\ -9n+1 \\ \underline{-9n+27} \\ 28 \end{array}$$

$$\begin{array}{r}
 n+4+\frac{-4}{n+3} \\
 n+3 \overline{) n^2+7n+8} \\
 \underline{-n^2+3n} \phantom{+8} \\
 4n+8 \\
 \underline{-4n+12} \\
 -4
 \end{array}$$

$$\begin{array}{r}
 n+12+\frac{123}{n-10} \\
 n-10 \overline{) n^2+2n+3} \\
 \underline{-n^2-10n} \phantom{+3} \\
 12n+3 \\
 \underline{-12n-120} \\
 123
 \end{array}$$

$\frac{0}{0}$  ← can't have a?

$\frac{6}{2}$  ← how many we have  
 $\frac{2}{2}$  ← put in groups of



$$\frac{3}{\frac{1}{2}} = 6$$



$\frac{2}{0}$  ← can't put into a group of nothing



$$\frac{(n+2)(n+4)}{n+4} = n+2 \quad [n \neq -4]$$