9-23-13

3rd Trig

$$3\overline{)1141}$$

$380\frac{1}{3}$

-9

24

-24

01

0

1

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

$$n+2\overline{)n^2+7n+10}$$

$n+5$

$-n^2+2n$

$5n+10$

$-5n+10$

0

$$n+7\overline{)n^2-n-56}$$

$n-8$

$-n^2+7n$

$-8n-56$

$-8n-56$

0

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

$n-5$

$-n^2+2n$

$-5n-10$

$--5n-10$

$$n+4\overline{)n^2+6n+10}$$

$n+2+\frac{2}{n+4}$

$-n^2+4n$

$2n+10$

$-2n+8$

$2 \leftarrow$ remainder

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

$n - 3 + \frac{23}{n+4}$

$-n^2 + 4n$

$-3n + 11$

$-(-3n - 12)$

23

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

$n + 10 + \frac{37}{n-3}$

$-n^2 - 3n$

$10n + 7$

$-(10n - 30)$

37

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

$n + 13 + \frac{129}{n-10}$

$-n^2 - 10n$

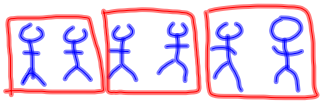
$13n - 1$

$-(13n - 130)$

129

$\frac{\quad}{\quad}$ ← Can't be zero

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



3

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

= 4

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

∴ Can't do it

$$\frac{(n+2)\cancel{(n-4)}^{1}}{\cancel{(n-4)}_{1}} = n+2 \quad [n \neq 4]$$

9-23-13
4th Trig

$$5\overline{)1863}\quad 372\tfrac{3}{5}$$
$$-15$$
$$36$$
$$-35$$
$$13$$
$$-10$$
$$3$$

$$n+2\overline{)n^2+6n+8}\quad n+4$$
$$-(n^2+2n)$$
$$4n+8$$
$$-(4n+8)$$
$$0$$

$$2\overline{)12}\quad 6$$

$$n+3\overline{)n^2-n-12}\quad n-4$$
$$-(n^2+3n)$$
$$-4n-12$$
$$-(-4n-12)$$
$$0$$

$$n-3\overline{)n^2+n-12}\quad n+4$$
$$-(n^2-3n)$$
$$4n-12$$
$$4n-12$$
$$0$$

$$n+3\overline{)n^2-6n+1}\quad n-9+\frac{28}{n+3}$$
$$-(n^2+3n)$$
$$-9n+1$$
$$-(-9n-27)$$
$$28$$

$$n+3 \overline{)\, n^2+7n+8}$$

$n + 4 + \frac{-4}{n+3}$

$-(n^2+3n)$

$4n+8$

$-(4n+12)$

-4

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

$n + 12 + \frac{123}{n-10}$

$-(n^2-10n)$

$12n+3$

$-(12n-120)$

123

$\frac{}{0}$ ← can't have a ?

$\frac{6}{2}$ ← how many we have

← put in groups of

3 total groups

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

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

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