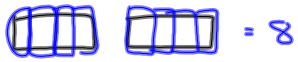
9-24-13

3rd Trig

Review from yesterday

In your smart mind,

Calculate $\frac{2}{\frac{1}{4}}$



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

$\frac{2}{\frac{2}{3}}$ 

$$n+2 \overline{)\, n^2+7n-1}$$

$n+5+\frac{-11}{n+2}$

$-(n^2+2n)$

$5n-1$

$-(5n+10)$

-11

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

$\frac{n^2+6n+5}{n+5} = \frac{(n+1)(n+5)}{n+5}$

$= n+1 \quad [n \neq -5]$

$\frac{n^2+6n+5}{n^2+7n+10} = \frac{(n+1)(n+5)}{(n+2)(n+5)}$

$\frac{n+1}{n+2} \quad [n \neq -5]$

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

$2n+1 \neq 0$

$-1 \quad -1$

$\frac{2n}{2} \neq \frac{-1}{2}$

$n \neq -1/2$

$\frac{n^3+27}{n^2+6n+9} = \frac{(n+3)(n^2-3n+9)}{(n+3)(n+3)}$ (SOFAS)

$\frac{n^2-3n+9}{n+3} \quad [n \neq -3]$

$$\frac{n^2 - n - 12}{n^2 - 3n - 4} = \frac{\cancel{(n-4)}(n+3)}{\cancel{(n-4)}(n+1)}$$

$$\frac{n+3}{n+1} \quad [n \neq 4]$$

New for tomorrow

$$n^2 + 8n + 12 = 0$$

$$(n+6)(n+2) = 0$$

$$n+6=0 \quad \text{OR} \quad n+2=0$$

$$n = -6 \quad \text{or} \quad n = -2$$

$$n^2 + 6n = 16$$

$$-16 \quad -16$$

$$n^2 + 6n - 16 = 0$$

$$(n+8)(n-2) = 0$$

$$n+8=0 \quad \text{OR} \quad n-2=0$$

$$n = -8 \quad \text{or} \quad n = 2$$

Quadratic formula

$$ax^2 + bx + c = 0$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

9-24-13
4th Trig

Continuing from yesterday

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

$\frac{2}{\frac{1}{4}} = 8$

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

$$n+3 \overline{)\, n^2+5n+2}$$

$n + 2 + \frac{-4}{n+3}$

$-(n^2+3n)$

$2n+2$

$-(2n+6)$

-4

$\frac{(n+3)(n-2)}{(n-2)} = n+3 \quad [n \neq 2]$

$\frac{n^2+8n+12}{n+6} = \frac{(n+2)(n+6)}{n+6}$

$= n+2 \quad [n \neq -6]$

$\frac{n^2+7n+10}{n^2+6n+5} = \frac{(n+2)(n+5)}{(n+1)(n+5)}$

$= \frac{n+2}{n+1} \quad [n \neq -5]$

$\frac{(2n+7)(n-1)}{2n+7} = n-1 \quad [n \neq -3\frac{1}{2}]$

$2n+7 \neq 0$

$2n \neq -7$

$n \neq -3\frac{1}{2}$

$\frac{n^3+8}{n^2+5n+6}$ SOFAS $\frac{(n+2)(n^2-2n+4)}{(n+2)(n+3)}$

$\frac{n^2-2n+4}{n+3} \quad [n \neq -2]$

$$\frac{n^2-4n-12}{n^2-6n} = \frac{(n+2)(n-6)}{n(n-6)}$$

$$= \frac{n+2}{n} \quad [n \neq 6]$$

Next lesson

$$x^2+8x+12=0$$

$$(x+6)(x+2)=0$$

$$x+6=0 \quad \text{OR} \quad x+2=0$$

$$x=-6 \quad \text{or} \quad x=-2$$

Quadratic Formula

$$ax^2+bx+c=0$$

$$x=\frac{-b\pm\sqrt{b^2-4ac}}{2a}$$