

August 28, 2017

#20) $\frac{4x+8}{15} \div \frac{5x+10}{10}$

Keep Change Flip

$$\frac{4x+8}{15} \cdot \frac{10}{5x+10}$$

$$\frac{4(\cancel{x+2})}{\cancel{15}^3} \cdot \frac{2}{5(\cancel{x+2})}$$

$$\frac{4}{3} \cdot \frac{2}{5} = \frac{8}{15}$$

Aug 28-8:05 AM

#15) $\frac{x^2+11x+15}{x+3}$

	x^2	x^1	$x^0=1$	
$x+3$	x^2	$+11x$	$+15$	ans.
	$\cancel{-x^2}$	$\cancel{-3x}$		$x+8 - \frac{9}{x+3}$
	0	$8x$	$+15$	
		$\cancel{-8x}$	$\cancel{-24}$	
		0	-9	Remainder

① $\frac{x^2}{x} = x$
 ② $x \cdot x = x^2$
 ③ $3 \cdot x = 3x$
 ④ $\frac{8x}{x} = 8$
 ⑤ $x \cdot 8 = 8x$
 ⑥ $3 \cdot 8 = 24$

ck $[(x+3)(x+8)] + (-9)$

$$\frac{[x^2 + 8x + 3x + 24] - 9}{x+3}$$

$$\frac{x^2 + 11x + 15}{x+3} \checkmark$$

Aug 28-8:18 AM

#24) $\frac{6}{x+8} + \frac{9}{8x+64}$

Recall $\frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm bc}{bd}$

$bd \leftarrow$ Common Denom.

Last C.D. (LCD)

LCD: $8(x+8)$

$$\frac{6}{x+8} + \frac{9}{8(x+8)}$$

$$\frac{6 \cdot 8 + 9}{8(x+8)} = \frac{48 + 9}{8(x+8)} = \frac{57}{8(x+8)} = \frac{57}{8x+64}$$

Aug 28-8:34 AM

#25) $\left(\frac{x}{4} - \frac{1}{2} = \frac{x+6}{2}\right)$ LCD: 4

$$x - 2 = 2x + 12$$

$$\boxed{-14 = x}$$

Aug 28-8:47 AM