

November 30, 2015

#11) $\frac{1}{b^2-7b+10} + \frac{1}{b-2} = \frac{2}{b^2-7b+10}$
 $(b-5)(b-2)$ $(b-5)(b-2)$

LCD: $(b-5)(b-2)$

$(b-5)(b-2) \cdot \frac{1}{(b-5)(b-2)} + (b-5)(b-2) \cdot \frac{1}{b-2}$

$= (b-5)(b-2) \cdot \frac{2}{(b-5)(b-2)}$

$1 + b - 5 = 2$
 $-4 + b = 2$
 $b = 6$

Nov 30-9:10 AM

#2) $\frac{1}{n} = \frac{1}{5n} - \frac{n-1}{5n}$

LCD: $5n$

$5n \cdot \frac{1}{n} = 5n \cdot \frac{1}{5n} + 5n \cdot -\frac{n-1}{5n}$

$5 = 1 - (n-1)$
 $5 = 1 - n + 1$
 $5 = 2 - n$
 $\frac{3}{-1} = \frac{-n}{-1}$
 $-3 = n$

Nov 30-9:17 AM

#26) $\frac{3x^2 - 39x + 90}{x^2 - 3x - 70}$

$3(x^2 - 13x + 30)$
 $(x-10)(x+7)$

$3(x-10)(x-3)$
 $(x-10)(x+7)$

$\frac{3(x-3)}{(x+7)}$ or $\frac{3x-9}{(x+7)}$

Nov 30-9:23 AM

#12) $\left(\frac{1}{x^2-3x} + \frac{1}{x-3} = \frac{3}{x^2-3x} \right)$

* factor $x(x-3)$ LCD: $x(x-3)$

$x(x-3) \cdot \frac{1}{x(x-3)} + x(x-3) \cdot \frac{1}{x-3} = x(x-3) \cdot \frac{3}{x(x-3)}$

$1 + x = 3$
 $x = 2$

Nov 30-9:28 AM

$4x^2 - 25 = 0$
 $(2x+5)(2x-5) = 0$

① $2x+5=0$
 $2x = -5$
 $x = -\frac{5}{2}$

② $2x-5=0$
 $2x = 5$
 $x = \frac{5}{2}$

Ch
 $x = -\frac{5}{2}$
 $4\left(-\frac{5}{2}\right)^2 - 25 = 0$
 $4\left[-\frac{5}{2}\right]\left[-\frac{5}{2}\right] - 25 = 0$
 $4\left[\frac{25}{4}\right] - 25 = 0$
 $25 - 25 = 0$
 $0 = 0$

Nov 30-9:37 AM

$1 - x^2$ $a = 1$
 $b = x$
 $(1+x)(1-x)$

Difference of Two Squares

$(a+b)(a-b) = a^2 - b^2$

Nov 30-9:40 AM