October 21, 2015

Quiz #5

#1) $\frac{19a^3b^9c^{11}}{abc} = 19a^2b^8c^{10}$

#2) $\frac{x^4(x^{-8})^{-9}}{(x^{-2})^{-3}} = \frac{x^4 \cdot x^{72}}{x^6}$

alt. $\frac{x^4 \cdot (x^{-2})^3}{(x^{-8})^9} = \frac{x^{76}}{x^6}$

$= x^{70}$

$\frac{x^4 \cdot x^{-6}}{x^{-72}}$

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$\frac{x^4 \cdot (x^{-8})^{-9}}{(x^{-2})^{-3}} = \frac{x^4 \cdot}{\left(\frac{1}{x^8}\right)^9}$

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#3) $(-5x^3y^{-4})(2x^{-1}y)$

$-10x^2y^{-3} = -\frac{10x^2}{y^3}$

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#4) $(x+9)(x^3+3x-8)$

$x^4 + 3x^2 - 8x + 9x^3 + 27x - 72$

$x^4 + 9x^3 + 3x^2 + 19x - 72$

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Factoring

① Determine a GCF
* GCF$(4xy^2, 6x^3y) = 2xy$
* GCF$(5x, 4) = 1$ Relatively Prime!

② Factored out the GCF from an expression

$3a^2 + 12a$

$3a(a+4) = 3a^2 + 12a$ ✓

GCF R.P.

③ Factoring by Grouping

④ Factor expressions of the form ax^2+bx+c
* where $a=1$

⑤ Factor expression of the form ax^2+bx+c
* where $a \neq 1$

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① $ba + ca$

$a(b+c)$

② $by^2 + cy^2$

$y^2(b+c)$

③ $b(x+5) + c(x+5)$

$(x+5)(b+c)$

#13) $x(y+4) + 2(y+4)$

$(y+4)(x+2)$

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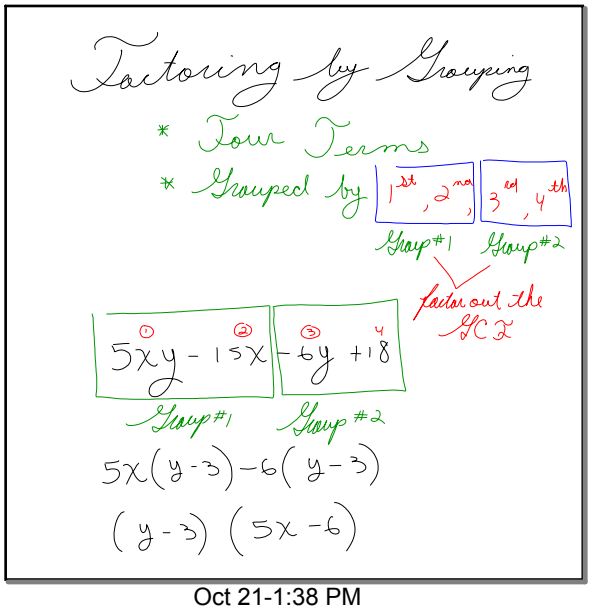

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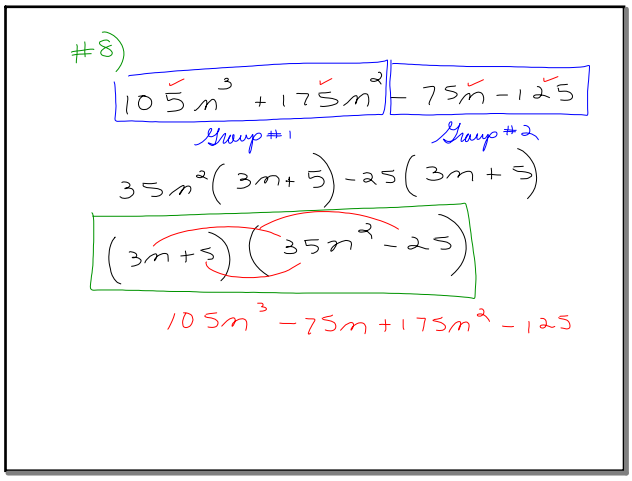

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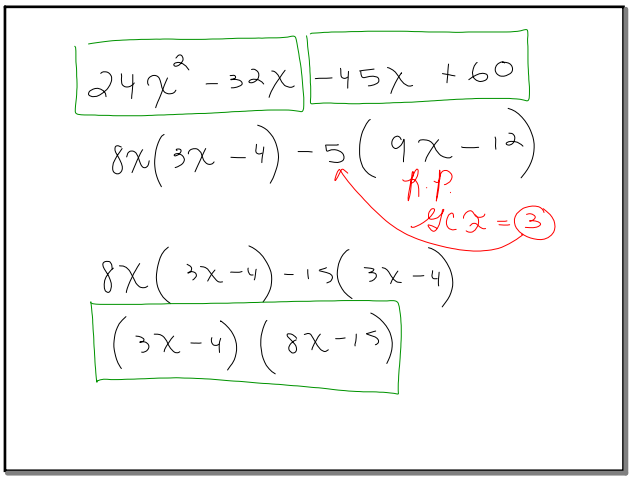

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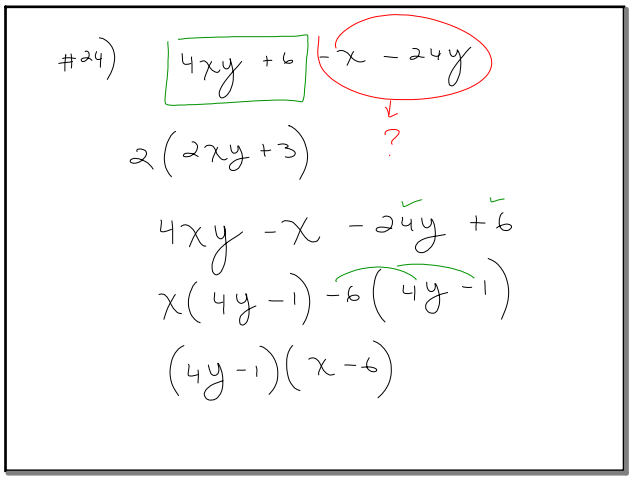

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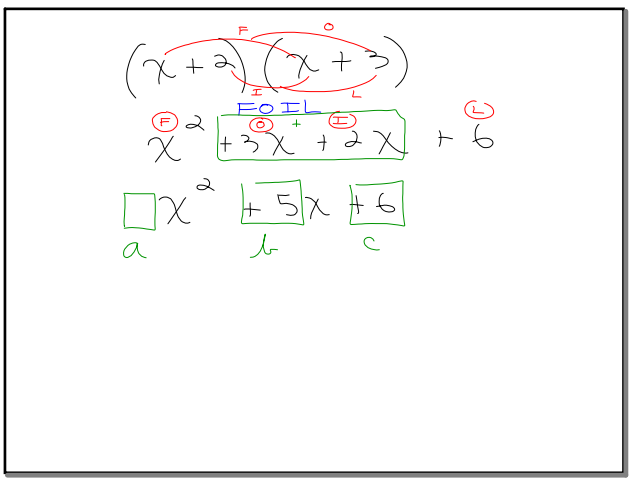

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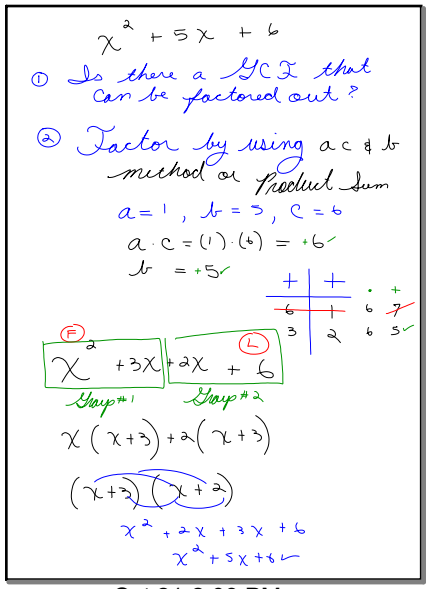

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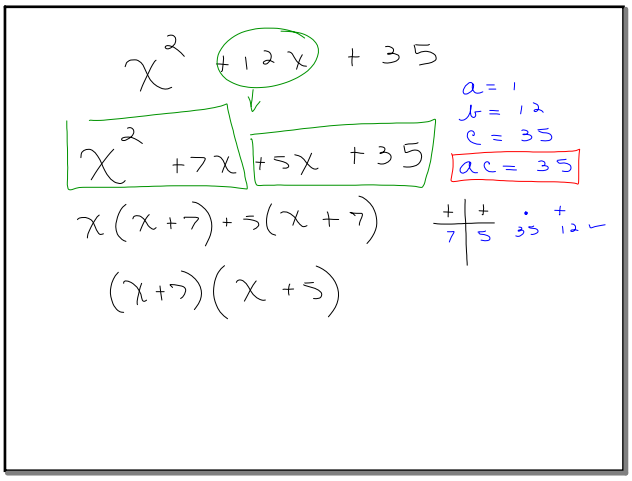

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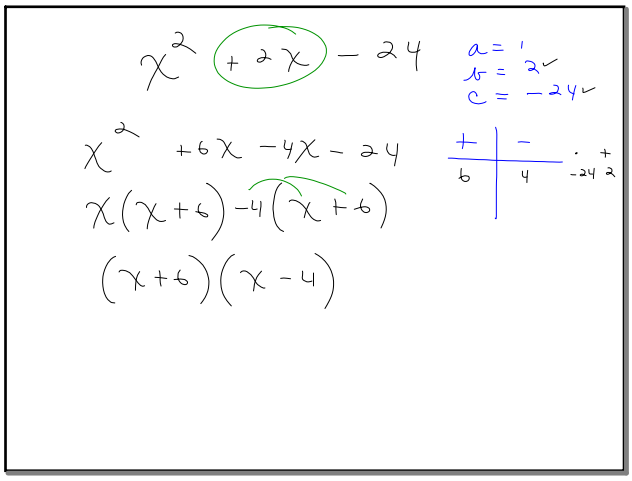

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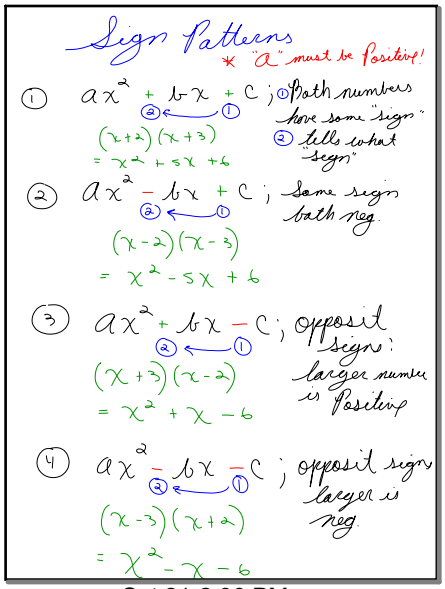

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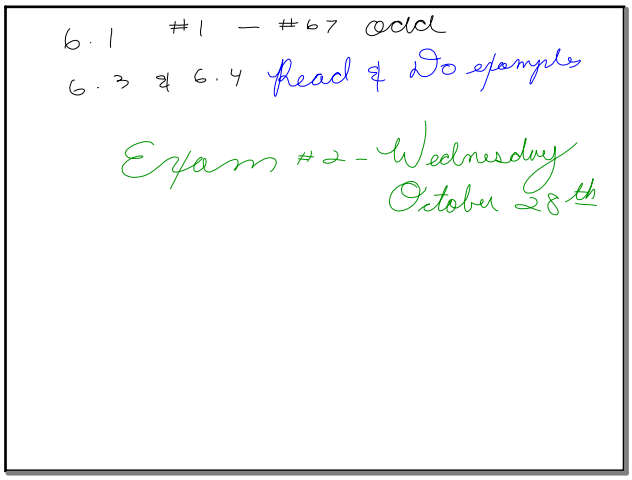

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