October 31, 2014

* Exam #2 - Wednesday
Everything through 6.1

Oct 31-10:00 AM

6.1

Factoring

① Finding a GCF

② Factoring out a GCF from an expression.

Oct 31-10:04 AM

a.) $24x + 32$ GCF: 8

$8(3x + 4) = 24x + 32$ ✓

N.P.

b.) $5x^3 - 10x^2 - 10x$ GCF: $5x$

$5x(x^2 - 2x - 2)$

N.P. ✓

c.) $2x^4y + 2x^3y^2 - 6x^2y^3$

GCF: $2x^2y$

$2x^2y(x^2 + xy - 3y^2)$

Oct 31-10:06 AM

$3x + 4x$

GCF: x

$x(3 + 4)$

$x\,7 = 7x$

$3(a+b) + 4(a+b)$

GCF: $(a+b)$

$(a+b)(3+4)$

$(a+b)7 = 7(a+b)$

Oct 31-10:15 AM

Factoring by Grouping

(Four-Term Expression)

$x^2 + 8x \;|\; + 3x + 24$

Group #1 Group #2

GCF: x GCF: 3

$x(x+8) + 3(x+8)$

GCF: $(x+8)$

$(x+8)(x+3)$ fully factored

$x^2 + 3x + 8x + 24$ ✓

Oct 31-10:13 AM

$x^2 - 6x \;|\; - 3x + 18$

GCF: x GCF: -3

$x(x-6) - 3(x-6)$

GCF: $(x-6)$

$(x-6)(x-3)$

Oct 31-10:21 AM

$x^2 - 2x \mid +7x - 14$

GCF: x GCF: 7

$x(x-2)+7(x-2)$

GCF: $(x-2)$

$(x-2)(x+7)$

Oct 31-10:27 AM

$4x^2 + 9x \mid -32x - 72$

GCF: x GCF: -8

$x(4x+9) - 8(4x+9)$

GCF: $(4x+9)$

$(4x+9)(x-8)$

Oct 31-10:30 AM

Doing 6.1 #1 - #75 m3

$$\frac{\frac{5}{2} + \frac{2}{x}}{\frac{-6}{x^2}} = \frac{\frac{5x+4}{2x}}{\frac{-6}{x^2}}$$

K C F

$$= \frac{5x+4}{2x} \cdot -\frac{x^2}{6}$$

$$= -\frac{x(5x+4)}{12}$$

or

$$= -\frac{5x^2+4x}{12}$$

Oct 31-10:35 AM

$$\frac{1}{2} + \frac{1}{2} \cdot 2 \div 2 - \frac{1}{2}$$

$$\frac{1}{2} + 1 \div 2 - \frac{1}{2}$$

$$\frac{1}{2} + \frac{1}{2} - \frac{1}{2}$$

$$\frac{1 - \frac{1}{2}}{2 - 1} = \frac{1}{2}$$

Oct 31-10:43 AM

$|x^2| - y^2 \quad x = -5 \; y = -4$

$|(-5)^2| - (-4)^2$

$|25| - 16$

$25 - 16 = 9$

Oct 31-10:47 AM