

October 23, 2015

quiz #8 → #9

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

$$-5x^3y^{-4} \cdot 2x^{-1}y$$

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

$$-10x^2y^{-3}$$

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

Oct 23-9:04 AM

6.1 Addition of

#19) $3x^2 - 6xy$ $-5x + 10y$ *Factor by Grouping*

Group #1 $3x(x - 2y)$ $GCF = 3x$

Group #2 $-5(x - 2y)$ $GCF = -5$

$3x(x - 2y) - 5(x - 2y)$

$(x - 2y)(3x - 5)$ GCF

Oct 23-9:12 AM

Kuta

#1) $8r^3 - 64r^2 + r - 8$

$$8r^2(r - 8) + 1(r - 8)$$

$(r - 8)(8r^2 + 1)$ GCF

Oct 23-9:17 AM

6.1

#57) $48a(2a + 5) - 42(2a + 5)$

$(2a + 5)(48a - 42)$ GCF

$(2a + 5)6(8a - 7)$ $R.P.V$ $not R.P.!$ $R.P.$

Oct 23-9:19 AM

- Factoring*
- ① Determine GCF
 - ② Factoring out a GCF from an expression
 - ③ Factoring by Grouping
 - ④ Factor $ax^2 + bx + c$ where $a = 1$
 - ⑤ Factor $ax^2 + bx + c$ where $a \neq 1$

Oct 23-9:23 AM

$ax^2 + bx + c$

$(x + 2)(x + 3)$

FOIL

$x^2 + 3x + 2x + 6$

$x^2 + 5x + 6$

Oct 23-9:27 AM

$\boxed{1}x^2 + \boxed{5}x + \boxed{6}$
 ① Is there a GCF to be factored out? If so, factor out!
 ② **Now Factor!**
 * ac & b Method
 * Product & Sum "

$x^2 + 5x + 6$

$\left. \begin{matrix} a=1 \\ b=5 \\ c=6 \end{matrix} \right\} \begin{matrix} ac=6 \\ r=5 \end{matrix}$

+	+	•	+
4	1		✓
3	2		✓

$x^2 + 3x + 2x + 6$
 * now factor by grouping
 $x(x+3) + 2(x+3)$
 factor out GCF
 $(x+3)(x+2)$

Oct 23-9:29 AM

$x^2 + 12x + 35$

$\left. \begin{matrix} a=1 \\ b=12 \\ c=35 \end{matrix} \right\} \begin{matrix} ac=35 \\ r=12 \end{matrix}$

+	+	•	+
7	5		✓

$x^2 + 7x + 5x + 35$
 $x(x+7) + 5(x+7)$
 $(x+7)(x+5)$
 $x^2 + 5x + 7x + 35$
 $x^2 + 12x + 35$

Oct 23-9:45 AM