

October 16, 2015  
 Exam #2 - October 30  
 No Class on November 20

Oct 16-9:06 AM

Quiz #8  
 #2)  $(n^3)^3 \cdot 2n^{-2}$   
 $n^3 \cdot n^3 \cdot n^3$   
 $\frac{n^9}{1} \cdot \frac{2}{n^2}$   
 $\frac{2n^7}{n^2} = 2n^5$

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#3  $(2x^0y^2)^{-3} \cdot 2yx^3$   
 $\frac{1}{(2y^2)^3} \cdot \frac{2yx^3}{1}$   
 $\frac{1}{2^3y^6} \cdot \frac{2yx^3}{1}$   
 $\frac{2yx^3}{8y^6} = \frac{x^3}{4y^5}$   
 $\frac{y^1}{y^6} = \frac{1}{y^5}$

$\frac{2}{8} = \frac{1}{4}$   
 $\frac{2}{8} \neq \frac{1}{4}$

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$\frac{1}{(2y^2)^3} = \frac{1}{(2y^2)(2y^2)(2y^2)}$   
 $= \frac{1}{8y^6}$   
 $(2^1)^3 = 2^3$

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$(a^m)^n = a^{m \cdot n}$   
 $(2^3)^3$

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$(x+2)^3 \neq 3(x+2)$   
 $= [(x+2)(x+2)](x+2)$   
 FOIL

Oct 16-9:27 AM

$$\begin{array}{l}
 [2 \cdot 3] \cdot 4 \cdot 5 \\
 [6 \cdot 4] \cdot 5 \\
 [24 \cdot 5] \\
 \boxed{120}
 \end{array}
 \qquad
 \begin{array}{l}
 24 \\
 \underline{5} \\
 120
 \end{array}$$

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#2)

$$\frac{1}{3} + 3 - \frac{1}{3} + \frac{1}{3} + 3 - \frac{1}{3}$$

$$3 + 3 = 6$$

*O of O Violation!*

Oct 16-9:31 AM

5.6  
#12)

$$(\cancel{x^2} + \cancel{x} + 1)(\cancel{x^2} - \cancel{x} - 1)$$

$$\cancel{x^4} - \cancel{x^3} - \cancel{x^2} + \cancel{x} - \cancel{x} - 1$$

$$\boxed{x^4 - x^2 - 2x - 1}$$

Oct 16-9:33 AM

#33)

First Outer

$$(9r - 7t)(3r - 9t)$$

\* Multiplying two Binomials

F:  $(9r)(3r) = 27r^2$

O:  $(9r)(-9t) = -81rt$

I:  $(-7t)(3r) = -21rt$

L:  $(-7t)(-9t) = 63t^2$

$27r^2 - 102rt + 63t^2$

Oct 16-9:38 AM

5.7

$$(\cancel{x} + 5)(\cancel{x} - 2)$$

F O + I L

$$x^2 - 2x + 5x - 10$$

$$\boxed{x^2 + 3x - 10}$$

Oct 16-9:46 AM

#7)

$$\frac{\frac{1}{3} + \frac{1}{4} - \frac{1}{5} + \frac{1}{6}}{\frac{1}{7}}$$

$$\frac{\frac{4+3}{12} - \frac{1}{5} + \frac{1}{6}}{\frac{1}{7}}$$

$$\frac{\frac{35-12}{60} + \frac{1}{6}}{\frac{1}{7}}$$

$$\frac{\frac{23}{60} + \frac{1}{6}}{\frac{1}{7}} = \frac{23+10}{60} \cdot \frac{7}{1} = \frac{33}{20} \cdot \frac{7}{1} = \frac{231}{20}$$

Oct 16-9:50 AM