October 13, 2015

Quiz #8 - Tomorrow

5.5 & Fractions

#1 - #57 all

Oct 13-9:06 AM

5.5

Example #6

$$\frac{x^{5m-4}}{x^{3-2m}} = x^{(5m-4)-(3-2m)}$$

same base

$$= x^{5m-4-3+2m}$$

$$= x^{7m-7}$$

$$\frac{a^m}{a^n} = a^{m-n}$$

Oct 13-9:09 AM

#26)

$$\frac{2x^4y^{-4}z^{-3}}{3x^2y^{-5}z^4}$$

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

$$\frac{2}{3}\cdot x^{4-2=2}\cdot y^{-4-(-5)=-4+5=1}\cdot\frac{1}{z^4 z^3}$$

Division Rule: $\frac{a^m}{a^n} = a^{m-n}$

Neg. Exp. Rule: $a^{-n} = \frac{1}{a^n}$

$$\frac{2}{3}\cdot x^2\cdot y^1\cdot\frac{1}{z^7}$$

$$\frac{2x^2}{3yz^7}$$

Oct 13-9:16 AM

$$(-4y+5)(8y^2-3y+2)$$

$$-32y^3 + 12y^2 - 8y + 40y^2 - 15y + 10$$

Collect like terms

$$-32y^3 + 52y^2 - 23y + 10$$

Oct 13-9:26 AM

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

$$= a^2 + ab + ba + b^2$$

$$= a^2 + ab + ab + b^2$$

$$= a^2 + 2ab + b^2$$

$$(3x-5)^2 = (3x-5)(3x-5)$$

$$= 9x^2 - 15x - 15x + 25$$

$$= 9x^2 - 30x + 25$$

Oct 13-9:32 AM

$$(7x+4)^4$$

Oct 13-9:43 AM