Whiteboard Practice – Review for Test

October 27, 2016 10:03 AM

	Repeated Mult.	Evaluate	Single Power
$12^4 \times 12^2$	$(12\times12\times12\times12)(12\times12)$	2985984	12^6
$(4^3)^2$	$(4\times4\times4)(4\times4\times4)$	4096	4^6
$-(5xy^3)^2$	$-1(5xyyy)(5xyyy)$	$-25x^2y^6$	$-(5^2x^2y^6)$
$2(3a^2b)^2$	$2(3aab)(3aab)$	$18a^4b^2$	$2(3^2a^4b^2)$
$-(4m^3n^2)^2$	$-(4mmmnn)(4mmmnn)$	$-16m^6n^4$	$-16m^6n^4$
$-9(3m^2)^3$	$-9(3mm)(3mm)(3mm)$	$-243m^6$	$-9(3^3m^6)$
$\left(\frac{4}{8^2}\right)^3$	$\left(\frac{4}{8\times8}\right)\left(\frac{4}{8\times8}\right)$	$\frac{64}{262144}$	$\frac{4^3}{8^6}$

	Single Power	Evaluate
$8^2 \times 8 \times 8^2$	8^5	32,768
$\frac{(-4)^1(-4)^4}{(-4)^2(-4)^2}$	$\frac{(-4)^{5-4}}{(-4)^4}$ $(-4)^1$	-4

$(-4)^2(-4)^2$ $(-4)^4$		
$\frac{(m^3)(m^2)(m^2)}{(m^3)(m)}$ $\frac{m^7}{m^4}$	m^3	X
$\frac{(2x^2)(3x^3)}{(x)(x)} = \frac{6x^5}{x^2}$	$6x^3$	$6x^3$

Evaluate: $7a^2 - 4b^3$

a) if $a = 4$ $b = 2$

$7a^2 - 4b^3$

☆ $7(4)^2 - 4(2)^3$

$7(16) - 4(8)$

$112 - 32 = 80$

b) if $a = -5$ $b = 3$

$7(-5)^2 - 4(3)^3$

$7(25) - 4(27)$

$175 - 108$

67

c) if $a = 5$ $b = (-3)$

$7(a)^2 - 4(b)^3$

$7(5)^2 - 4(-3)^3$

$7(25) - 4(-27)$

$7(25) - 4(-27)$

$175 + 108$ $\quad$ 283

Solve with an equation:

a) the square of the sum of seven and eight

+

$(7+8)^2 = 15^2 = 225$

b) the cube of the sum of negative 2 and negative 3.

$[(-2)+(-3)]^3 = (-5)^3 = -125$

c) The (square of the sum of 5 and 2) is decreased by 12.

$(5+2)^2 - 12$

$7^2 - 12 = 49 - 12 = 37$

d) The (cube of the sum of

d) The cube of the sum of 5 and 2 is added to the square of the sum of 3 and 4.

$(5+2)^3 + (3+4)^2$

$7^3 + 7^2$

$343 + 49 = 392$