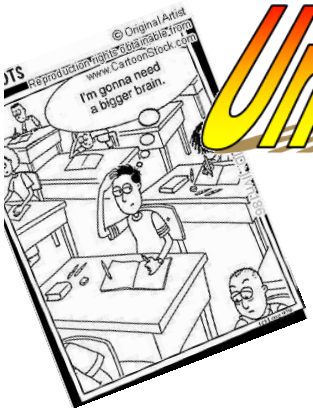


Unit 2 Test Review

Warm Up

1) Simplify then Evaluate

$$\left(\frac{9}{3}\right)^4 - 2^5 \times 2^9 \div 2^6 +$$

$$\frac{9^4}{3^4} - 2^5 \times 2^3$$

$$\frac{9^4}{1} - 2^8$$

$$6561 - 256$$

$$81 - 256$$

$$-175$$

Remember it is all the top divided by all the bottom →

$$\frac{(-2)^4 - (-2) \times 10 - (8)^0}{-5} + \frac{1}{4}$$

Exponents first

$$= \frac{16 - (-2) \times 10 - 1}{-5} + \frac{1}{4}$$

Multiplication

$$= \frac{16 - (-20) - 1}{-5} + \frac{1}{4}$$

Add the numerators (but watch your signs)

$$= \frac{16 + 20 - 1}{-5} + \frac{1}{4}$$

$$= \frac{35}{-5} + \frac{1}{4}$$

Reduce

$$= \frac{-7}{1} + \frac{1}{4}$$

Find Common Denominators and Add

$$= \frac{-28}{4} + \frac{1}{4}$$

$$= \frac{-27}{4}$$

$$-\frac{27}{4}$$

$5^3 + [10 - 5]^2$

EVALUATE

$$\frac{2^5 \times (10-7)^3 + 9^0}{-3^5 \times (-5)^2 + (5-6)^5}$$

$5^3 + [10 - 5]^2$

$5^3 + [5]^2$

$125 + 25$

150

EVALUATE

$$\frac{2^5 \times (10-7)^3 + 9^0}{-3^5 \times (-5)^2 + (5-6)^5}$$

$$\frac{2^5 \times (3)^3 + 9^0}{-3^5 \times (-5)^2 + (-1)^5}$$

$$\frac{32 \times 27 + 1}{-243 \times 25 + -1}$$

$$\frac{32 \times 27 + 1}{-243 \times 25 + -1}$$

$$\frac{864 + 1}{-6075 + -1}$$

$$\frac{865}{-6076}$$

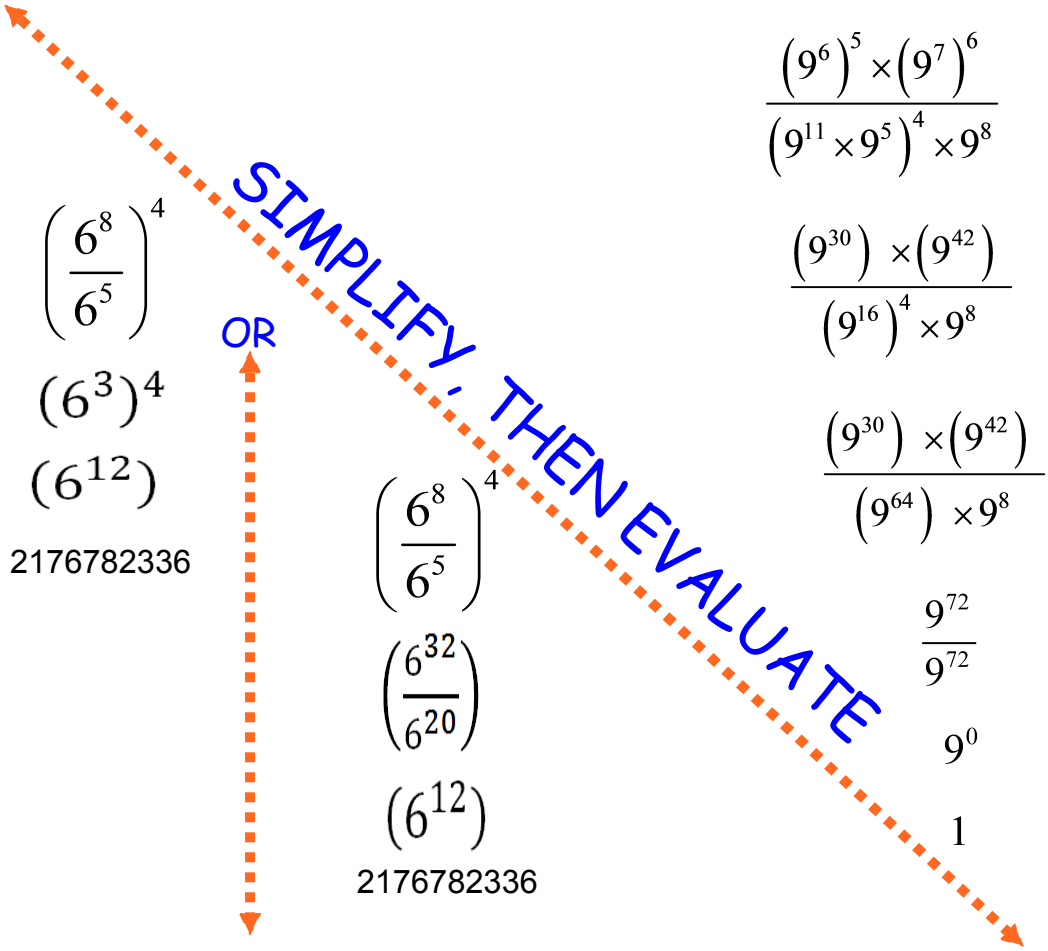
$$\frac{865}{-6076}$$

-0.14

$$\left(\frac{6^8}{6^5}\right)^4$$

$$\frac{\left(9^6\right)^5 \times \left(9^7\right)^6}{\left(9^{11} \times 9^5\right)^4 \times 9^8}$$

SIMPLIFY, THEN EVALUATE


SIMPLIFY, THEN EVALUATE
$\left(\frac{6^8}{6^5}\right)^4$
$(6^3)^4$
(6^{12})
2176782336
OR
$\left(\frac{6^8}{6^5}\right)^4$
$\left(\frac{6^{32}}{6^{20}}\right)$
(6^{12})
2176782336
$\frac{(9^6)^5 \times (9^7)^6}{(9^{11} \times 9^5)^4 \times 9^8}$
$\frac{(9^{30}) \times (9^{42})}{(9^{16})^4 \times 9^8}$
$\frac{(9^{30}) \times (9^{42})}{(9^{64}) \times 9^8}$
$\frac{9^{72}}{9^{72}}$
9^0
1

Class/Homework

Page 87-89

Complete the following review questions:

1ad,	13 ad,	23 bd,
3abc,	14,	24,
7a,	17,	26,
8abc,	18 bc,	27,
9,	19,	
12,	20 ac,	

If you finish this there is a simplifying worksheet that you can work on:

Extra Practice W.S