

Warm-Up

October 28, 2015

← use exponent laws!  
Simplify each of the following:

A.  $(2^3 \times 2^6)^2 - (3^7 \div 3^5)^4$

$$(2^9)^2 - (3^2)^4$$

$$2^{18} - 3^8$$

A.  $(2^3 \times 2^6)^2 - (3^7 \div 3^5)^4$

$$(2^6 \times 2^{12}) - (3^{28} \div 3^{20})$$

$$2^{18} - 3^8$$

$$B. [(-4)^3 \times (-4)^3]^2 + (4^3 \times 4^2)^2$$

$$\left((-4)^6\right)^2 + \left(4^5\right)^2$$

$$(-4)^{12} + 4^{10}$$

$$B. [(-4)^3 \times (-4)^3]^2 + (4^3 \times 4^2)^2$$

$$\left[(-4)^6 \times (-4)^6\right] + \left(4^6 \times 4^4\right)$$

$$(-4)^{12} + 4^{10}$$

$$[(-3)^4]^2 \times [(-4)^0]^2 - [(-3)^3]^0$$

$$(-3)^8 \times (-4)^0 - (-3)^0$$

Powers and Exponent Laws  
Test Friday

$$-3^4 \times 3^2$$

1. Write the product as a power then evaluate

$$-(3 \times 3 \times 3 \times 3) \quad -3^4 \text{ or } -(3)^4 \quad \textcircled{-81}$$

2. Predict the sign

$$-(-2)^5 \quad -(-) \quad \text{positive}$$

3. Write each number as a power of 10

A. 34 502  $30\,000 + 4\,000 + 500 + 2$   
 $3 \times 10^4 + 4 \times 10^3 + 5 \times 10^2 + 2 \times 10^0$

B. 7 002  $7\,000 + 2$   
 $7 \times 10^3 + 2 \times 10^0$

4. Evaluate  $\textcircled{\text{BEDMAS}}$

A.  $[3 \times (-2)^3 - 4]^2$   
 $(3 \times -8 - 4)$   
 $(-24 - 4)^2 \quad (-28)^2 \quad \textcircled{784}$

B.  $(-4)^2 - 3 + (-2)^4 - 1^5 + 1^0$

$$\begin{aligned} &16 - 3 + 16 - 1 + 1 \\ &13 + 16 - 1 + 1 \\ &29 - 1 + 1 \\ &\textcircled{29} \end{aligned}$$



## 5. Simplify

$$5^6 \times 5^8 \div 5^9 + 4^3 \times 4^0$$

$$5^{6+8-9} + 4^{3+0}$$

$$5^5 + 4^3 \leftarrow$$



6. Simplify - Use exponent Laws!

$$(7^2 \times 4^3)^4 \times (4^8 \div 4^7) + 3^2$$

$$7^8 \times 4^{12} \times 4^1 + 3^2 \leftarrow$$

$$7^8 \times 4^{13} + 3^2$$



7. Simplify then evaluate

$$[(-2)^5 \div (-2)^4]^3 - [(-5)^2 \times (-5)^3]^0$$

$$[(-2)^1]^3 - [5^5]^0$$

$$(-2)^3 - 5^0$$

$$-8 - 1$$

$$-9$$

**1. Test Review Page 87 -89**

1, 2, 3, 4, 6, 7, 8, 9, 10 [a], 12, 13,  
14, 18, 20, 21[a], 23, 24, 26, 27

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Extra!!!

**2. Textbook Extra practice Page 90 1, 2, 3, 4, 5, 7, 8**

**3. Extra assignment...with worked out answers**



## Attachments

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page 85 simplified answers.notebook