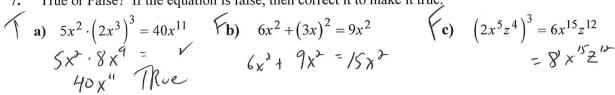
6.2A Properties of Exponents

#1 – 6: Multiple choice: Circle the correct answer

1 0. Multiple choice. Office the correct answer		
1. Which of the following is	$2. Simplify 3^2 \cdot 3^3$	3. Simplify $2^4 \cdot 2^3$
not equal to $\left(\frac{3}{4}\right)^0$?	[A] 3 ⁵	12
[A] 1 ²³	[B] 3 ⁶	$ \begin{array}{c c} $
$[\mathbf{B}] \left(\frac{4}{3}\right)^0$	[C] 9 ⁵	[C] 4 ⁷
4. Simplify $7^{12} \div 7^3$	5. Simplify $(3^2)^8$	$6. Simplify 2^3 + 2^2$
[A] 7 ⁴		[A] 10
[B] 7 ⁹)	(A) 316	[B] 12
[C] 7 ¹⁵	[B] 3 ¹⁰	[C] 32
[,	[C] 3 ⁶	

7. True or False? If the equation is false, then correct it to make it true.



- 8. Is the following statement true? $(x^a)^b = (x^b)^a$? Why or why not? $(x^a)^b = (x^b)^a$? Why or why not?
- 9. Is the following statement true? $(x^2)^3 = x^{2+3}$? Why or why not? Take Using Power of a Power view $(x^2)^3 = x^{3+3}$?

6.2A Properties of Exponents

#10-15: Simplify. Your answer should contain only positive exponents.

$$4x^2x^3$$

$$4\chi$$

11.
$$2k(3km) + 4m(k^2)$$

 $6K^3m + 4K^3m$
 $10K^3m$

12.
$$3x \cdot (2x^4)^3 \cdot x^3$$

$$(3x)(8x^{13}) \cdot x^3$$

$$24x^{16}$$

13.
$$(3x^4y^5)^2$$
 $(9x^8y'^0)$

14.
$$(2m^4)^3 \cdot 2m^4$$

$$8m^{13} \cdot 2m^4$$

$$16m^{16}$$

15.
$$(x^0)^4 \cdot (2x^3)^3$$

$$(1)^4 \cdot 8x^9$$

$$8x^9$$

Section 6.2A

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