

Unit 6 Day 2  
MORE PROPERTIES OF EXPONENTS HOMEWORK

**Directions:** Simplify the following. You may leave the coefficients simplified (write your final answer as a product of exponents).

1.  $5^2 \cdot 3^3 \cdot 5^2$   
 $5^4 \cdot 3^3$

2.  $(5^2)^5$   
 $5^{10}$

3.  $5y(y^3)^4$   
 $5y^{13}$

4.  $(c^3d^4)^2$   
 $c^6d^8$

5.  $3^2 \cdot x^4 \cdot x \cdot 3^5$   
 $3^7 x^5$

6.  $(a^5 \cdot a^3)^2$   
 $a^{16}$

Unit 6 Day 2  
MORE PROPERTIES OF EXPONENTS HOMEWORK

**Directions:** Simplify the following. You may leave the coefficients simplified (write your final answer as a product of exponents).

1.  $5^2 \cdot 3^3 \cdot 5^2$

2.  $(5^2)^5$

3.  $5y(y^3)^4$

4.  $(c^3d^4)^2$

5.  $3^2 \cdot x^4 \cdot x \cdot 3^5$

6.  $(a^5 \cdot a^3)^2$

$$7. (5a^5b)^2$$
$$25a^{10}b^2$$

$$8. 5^3x^5y \cdot x^2y^3$$
$$5^3x^7y^4$$

$$9. (x^3)^7 \cdot x$$
$$x^{22}$$

$$10. (2a^4b)^2 \cdot ab^5$$
$$4a^9b^7$$

$$7. (5a^5b)^2$$

$$8. 5^3x^5y \cdot x^2y^3$$

$$9. (x^3)^7 \cdot x$$

$$10. (2a^4b)^2 \cdot ab^5$$