

Name:

## Unit 6 - Day 2

### Quotient Properties of Exponents: Homework

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

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

3.  $c^3 c^5 = c^8$

4.  $(2xy)^3 = 2^3 x^3 y^3$

5.  $5y \cdot (y^3)^4 = 5y \cdot y^{12} = 5y^{13}$

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

7.  $x^7 \cdot (x^3)^2 = x^7 \cdot x^6 = x^{13}$

8.  $y^2 \cdot y^2 \cdot x \cdot x^4 = y^4 \cdot x^5$

9.  $\frac{a^3 b^2}{ab} = a^2 b$

10.  $\frac{2^3}{2} = 2^2$

11.  $\frac{c^4 \cdot c}{c} = \frac{c^5}{c} = c^4$

12.  $\left(\frac{a}{2}\right)^3 = \frac{a^3}{2^3}$

13.  $\left(\frac{3x^2y}{x}\right)^3 = \frac{3^3 x^6 y^3}{x^3} = 3^3 x^3 y^3$

14.  $\left(\frac{3x^8y^5}{2xy}\right)^2 = \frac{3^2 x^{16} y^{10}}{2^2 x^2 y^2} = \frac{3^2 x^{14} y^8}{2^2}$