

Name: _____

Basic Skills

Date: _____

Quotient Properties of Exponents

Simplify the expression. The final answer should not have any negative exponents.

1. $\left(\frac{2}{x}\right)^5$

2. $\frac{1}{x^8} \cdot x^{20}$

3. $\left(\frac{b^{10}}{b^3}\right)^{-2}$

4. $\frac{(t^{-4})^9}{(t^{-4})^3}$

5. $\frac{(a^6 \cdot a^3)^3}{a^7}$

6. $\left(\frac{7x^{-2}y}{x^8y^{-5}}\right)^3$

7. $\frac{r^{-5} \cdot r^5}{r^3}$

8. $\frac{(2z)^4}{3z^2}$

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

10. $\left(\frac{3m^2n^4}{2mn^3}\right)^3$

11. $-\frac{12xy}{7x^4} \cdot \frac{21x^5y^2}{4y}$

12. $\frac{5x^{-2}}{3x} \cdot \frac{2y^3}{x^{10}}$