

Algebra II
Exponents #1

Name _____

Simplify. Your answer should contain only positive exponents.

1. $(x^{-2}x^{-3})^4$

2. $(n^3)^3 \cdot 2n^{-1}$

3. $\frac{2y^3 \cdot 3xy^3}{3x^2y^4}$

4. $\frac{2x^2y^4 \cdot 4x^2y^4 \cdot 3x}{3x^{-3}y^2}$

5. $(x^9y^7)^2 \div (x^8y^7)^3$

6. $\left(\frac{s^{-3}}{4t}\right)^{-3} \left(\frac{5t}{s^{-7}}\right)^{-2}$

7. $\frac{(2a)^{-1}}{2 \cdot a^{-2}}$

8. $\frac{(2hj^2k^{-2} \cdot h^4j^{-1}k^4)^0}{2h^{-3}j^{-4}k^{-2}}$

9. $(x^{-3}y^{-1})^{-1} (x^{-3}y^0)^2$

10. $\left(\frac{-49u^3v^4}{-7u^4v^7}\right)^{-1}$

11. $\left(\frac{(a^3b^5)^{-2}}{a^5b^2}\right)^{-1}$

12. $\left(\frac{(2s^3t^2y)^2}{(s^3t^{-4})^{-1}}\right)^2$