



I. Simplify the exponential expression, writing your answer as a fraction in simplest form.
LEAVE NO NEGATIVE EXPONENTS!

1. 10^{-2}	2. $\left(\frac{2}{5}\right)^{-3}$	3. $8^5(8^{-7})$
4. $(-10)^0 \cdot \frac{1}{3^{-3}}$	5. $\left(\frac{1}{2^{-2}}\right)^{-3}$	6. $\frac{3^{43}}{3^{40}}$

II. Rewrite the expression with **positive exponents**.

7. $(3x^9y^2)^4$	8. $\left(\frac{x^6}{y^3}\right)^2\left(\frac{y^{10}}{x^3}\right)^2$	9. $\frac{(2x^2)^3}{6x^4}$
10. $6x^3 \cdot 3x^{-4}$	11. $(201x^6)^{-8}(201x^6)^8$	12. $\frac{5a^2b^7}{(2ab)^{-3}}$

13. $\frac{8u^4v^8}{-2u^2v^{11}}$

14. $\left(\frac{4k^2m^2}{16k^5m^3}\right)^{-1}$

15. $(-4x^{-3}y^4)^2(8x^2y^5)$

16. $\left(\frac{56x^{12}y^4}{8x^{-3}y^{15}}\right)^2$

17. $\frac{(3a^4b^2)^{-3}}{9a^{-3}b^8}$

18. $(-11)^{-2}y^0$

19. $(-6a^3b)(2a^{-3}b^{-5})$

20. $\frac{9x^0y^2z^{-6}}{36z^2y^9}$

21. $(5p^{-3}q)^2(3p^8q^4)$