

Student Created Simplifying Exponents Problems

$$1. \frac{(9x^4b^3y)^5}{27x^5by^4}$$

$$2. \left(\frac{128y^{-20}}{8x^6} \right)^{-10}$$

$$3. \left(\frac{8a^3b^3c^2}{4a^2b^{10}c^5} \right)^2$$

$$4. \frac{(7b^5a^{-3})^{-2}}{21b^2a^8}$$

$$5. \frac{48L^{14}f^5c^2g^3}{4L^{11}f^3a^2g^4}$$

$$6. \frac{10x^{-4}y^{10}}{(2x^5y^2)^{-1}}$$

$$7. \frac{14j^8(k^2h^4)^{-2}}{7j^6(e^{10}k^3)^{-3}}$$

$$8. \frac{12n^{-3}f^4y^2}{4n^{-2}f^5y}$$

$$9. \frac{(24x^7y^5)^{-5}}{(2x^{20}y^3)^{-2}}$$

$$10. \frac{18c^{-6}d^{-3}}{3d^7c^{-4}}$$

$$11. \frac{(4y^{-2}x)^3}{56y^3x^{-13}}$$

$$12. \frac{125x^{-6}y^7}{5(x^7y^5)^{-1}}$$

$$13. \frac{(-4a^8b^{-9})^{-2}}{6ab^2}$$

$$14. \frac{-3(mn^{-5})^6}{2m^{-2}n}$$

$$15. \left(\frac{24x^{-3}y^8z}{6x^3y^2z^{-4}} \right)^{-1}$$

$$16. \frac{64x^{-4}y^{-8}}{8(x^2y^6)^{-1}}$$

$$17. \frac{4a^{-2}b^2}{2a^6b^4}$$

$$18. \frac{(-8x^4y^2)^{-2}}{x^2y^4}$$

$$19. \frac{(8x^{-6}y^{-4})^{-2}}{(6x^8y^2)^{-6}}$$

$$20. \left(\frac{m^{-5}n^3}{m^5x^3n^{-3}} \right)^{-2}$$

$$21. \frac{(10x^5b^7y^{-2})^{-3}}{10x^4b^2y^2}$$

$$22. \frac{(21y^{-6}t^4)^{-3}}{7y^2t^7}$$

$$23. \left(\frac{6^{-2}x^3y^2}{42y^5z} \right)^3 \cdot \left(\frac{xy^2}{z^3} \right)^{-6}$$

$$24. \frac{\left(\frac{25a^7b^2}{5a^2b^2} \right)^{-1} \cdot \left(\frac{30b^3}{10a^5c^3} \right)^2}{(5a^6b^2c)^2}$$

$$25. \frac{11(x^6b^{12}z^9)^2}{7z^8b^7x^{-3}}$$

$$26. \frac{(b^6ac^{-3})^{-4}}{a^{-5}b^{-2}} \cdot \left(\frac{30a^6c^4}{5b^2a} \right)^2$$

$$27. \frac{144r^{15}a^8s^{42}}{12s^7r^{81}a}$$

$$28. \frac{(2y^2n^3)^6}{y^4n^7}$$

$$29. \frac{v^3d^2}{(v^5d^3)^8}$$

$$30. \left(\frac{19K^{-4}L^9}{27K^9L^{-3}} \right)^3$$

$$31. \left(\frac{22x^9y^{-4}a}{3x^7a^{-5}} \right)^6$$

$$32. \frac{4c^{-2}b^6}{2bc^4}$$

$$33. \frac{6a^{17}b^{85}}{36(a^3b^4)^3}$$

$$34. \frac{8(h^{-4}g^{-2})^{-9}}{2a^9c^{12}g^{-11}}$$

$$35. \frac{(-3a^3b^4c^{15})^9}{5(a^{-4}b^{-5}c)^{-5}}$$