

In Exercises 6–17, rewrite the expression using positive exponents. 13. $\frac{x^6}{y^7}$

$$6. x^{-7} \frac{1}{x^7}$$

$$7. x^{-9} \frac{1}{x^9}$$

$$9. 3x^{-2}$$

$$10. \frac{1}{2x^{-3}} \frac{x^9}{2}$$

$$11. \frac{1}{4x^{-5}} \frac{x^5}{4}$$

$$13. x^6 y^{-7}$$

$$14. 3x^{-3} y^{-8} \frac{3}{x^9 y^6}$$

$$15. 6x^{-2} y^{-4} \frac{6}{x^2 y^4}$$

$$16. \frac{1}{7x^{-4} y^{-1}} \frac{x^4 y}{7}$$

$$17. \frac{1}{2x^{-10} y^{12}} \frac{x^{10}}{2y^{12}} \cdot \frac{1}{4}$$

In Exercises 18–29, evaluate the expression.

$$18. 3^{-2} \frac{1}{9}$$

$$19. 2^{-4} \frac{1}{16}$$

$$20. -4^0 \cdot \frac{1}{2^{-2}} - 4$$

$$21. 4^{-3} \cdot 4^2$$

$$22. 6^3 \cdot 6^{-1} 36$$

$$23. 8^4 \cdot 8^{-4} 1$$

$$24. 7^{-9} \cdot 7^9 1$$

$$25. (5^{-3})^2$$

$$26. (-4^{-2})^{-1} - 16$$

$$27. -6 \cdot (-6)^{-1} 1$$

$$28. 5 \cdot 5^{-1} 1$$

$$29. 2^0 \cdot 3^{-3} \frac{1}{27}$$

In Exercises 30–41, rewrite the expression using positive exponents. 25. $\frac{1}{15,625}$

$$30. (-3)^0 x$$

$$31. (5y)^{-2} \frac{1}{25y^2}$$

$$32. (-2x)^{-3} - \frac{1}{8x^3}$$

$$33. (-4a)^0$$

$$34. (-3x)^{-1} \cdot 2y - \frac{2y}{3x}$$

$$35. (4xy)^{-2} \frac{1}{16x^2 y^2}$$

$$36. (3x)^{-1} \frac{1}{3x}$$

$$37. (2a^{-3})^3$$

$$38. \frac{4}{b^{-2}} 4b^2$$

$$39. \frac{5}{a^{-4}} 5a^4$$

$$40. \frac{1}{(4x)^{-3}} \frac{64x^3}{(4x)^{-3}}$$

$$41. \frac{1}{(2y)^{-5}} \frac{32y^5}{(2y)^{-5}}$$