Daily Practice

Simplify.

26. $\left(\frac{2}{3}\right)^4$

27. $\left(\frac{a^4}{b^2}\right)^3$

28. $\left(\frac{a^3b^2}{ab^3}\right)^6$

29. $\left(\frac{xy^2}{x^3y}\right)^3$

30. $\left(\frac{1}{7}\right)^{-3}$

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

32. $\left(\frac{8w^7}{16}\right)^{-1}$

33. $\left(\frac{1}{4}\right)^{-2}\left(\frac{6x}{7}\right)^{-2}$

Simplify. If possible.

34. $\frac{x^6}{x^3}$

35. $\frac{8d^8}{4d^2}$

36. $\frac{x^2y^3}{a^2b^3}$

37. $\frac{(3x^3)^3}{(6x^2)^2}$

38. $\frac{(5x^2)^3}{5x^3}$

39. $\left(\frac{c^2a^3}{a^{-1}}\right)^2$

40. $\left(\frac{3a}{a^3 \cdot a^0}\right)^3$

41. $\left(\frac{-p^4}{-5p^3}\right)^{-2}$

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

43. $\left(\frac{10^2}{10^{-3} \cdot 10^5}\right)^{-1}$

44. $\left(\frac{x^2y^2}{x^2y}\right)^{-3}$

45. $\frac{(-x^2)^4}{-(x^2)^4}$

Find the missing exponent(s).

50. $\frac{x^{\square}}{x^4} = x^2$

51. $\frac{x^7}{x^{\square}} = x^4$

52. $\left(\frac{a^2}{b^{\square}}\right)^4 = \frac{a^8}{b^{12}}$

53. $\left(\frac{x^4}{y^{\square}}\right)^{-1} = \frac{y^3}{x^{\square}}$