

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Chapter 8 Review 2**  
**Simplifying Exponents**

**Simplify. Your answer should contain only positive exponents.**

1.  $3b^0 \cdot 2a^3$

2.  $x \cdot yx^2 \cdot yx^2$

3.  $3x^3y^3 \cdot 3x^3y^3$

4.  $3mn \cdot 3mn^3$

5.  $3ab^3 \cdot a^3b^3$

6.  $2n^3 \cdot 3mn^3$

7.  $2a^3b^3 \cdot 2a^3b^2$

8.  $3x \cdot 2y^3$

9.  $3mn^2 \cdot 2m^2n^3$

10.  $3u^2v^2 \cdot 2uv$

11.  $-nm^{-4} \cdot (m^0n^4)^3$

12.  $(-x^3 \cdot x^{-4})^5$

13.  $(-x^3y^2)^4 \cdot -xy^3$

14.  $(x^3y^3)^5(-x^{-4}y^0)^3$

15.  $-xy^{-3} \cdot (x^{-1}y^4)^3$

16.  $(x^{-3}y^4)^5 \cdot -y$

17.  $(x^{-2}y^5)^3 \cdot x^{-5}y^{-3}$

18.  $(-m^{-3}n^0)^4 \cdot -m^2n^2$

19.  $x^{-5}y^4 \cdot (-y^3)^4$

20.  $(-m^3)^3 \cdot -m^2n^4$

21.  $\frac{4m^{-2}n^{-2}}{-4mn^4}$

$$22. \frac{-5x^0y^2}{-4x^{-5}y^{-1}}$$

$$23. \frac{-5x^{-3}y^2}{-xy^2}$$

$$24. \frac{xy^{-3}}{2x^4y^4}$$

$$25. \frac{-4u^0v^{-3}}{-3v^3}$$

$$26. \frac{3m^5}{-m^3n^5}$$

$$27. -\frac{5m^{-5}}{5n^{-4}}$$

$$28. \frac{2a^{-3}b^5}{3a^2b^5}$$

$$29. \frac{2v^{-3}}{2u^3v^{-1}}$$

$$30. \frac{x^{-3}y^{-2}}{-3x^0y^5}$$

$$31. 3n^2 \cdot 3n$$

$$32. v^3 \cdot 2v^3$$

$$33. 2n^2 \cdot 2n^2$$

$$34. a^2 \cdot a^2$$

$$35. 3x \cdot x^3$$

$$36. 3x \cdot 3x^0$$

$$37. x^3 \cdot 2x^2$$

$$38. 2a \cdot 2a^3 \cdot 2a^0$$

$$39. 3k^3 \cdot 2k^2 \cdot 3k$$

$$40. p^2 \cdot 3p^2$$

$$41. \frac{3x^0}{-5x^5}$$

$$42. \frac{4x}{-x^{-1}}$$

$$43. \frac{5x^2}{3x^5}$$

$$44. \frac{3v^{-4}}{-v^4}$$

$$45. -\frac{5a^0}{2a^{-4}}$$

46.  $\frac{x^{-5}}{-2x^{-4}}$

47.  $-\frac{2x^5}{2a^{-4}}$

48.  $-\frac{3n^{-1}}{5n^5}$

49.  $\frac{5x^4}{-5x}$

50.  $\frac{4n^{-4}}{-4n^0}$

51.  $\frac{5m^{-2}n^{-4}}{-4m^0n^2}$

52.  $\frac{-4x^0y^3}{-2x^{-5}y^{-5}}$

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

54.  $\frac{mn^4}{2m^0n^0}$

55.  $\frac{-4a^0}{-3a^4}$

56.  $\frac{-3mn^{-2}}{-4m^5n^3}$

57.  $-\frac{x^{-2}y^{-3}}{3y^{-5}}$

58.  $\frac{5x^3y^3}{3x^5y^5}$

59.  $\frac{-5y^0}{-5x^{-5}y^3}$

60.  $\frac{5x^3y^{-1}}{-2x^5y^3}$

61.  $\frac{(-x^2y^3)^2}{(-x)^2 \cdot -xy^3}$

62.  $\left(-\frac{x^3y^3}{x^{-5}y^0 \cdot -x^5y^3}\right)^{-1}$

63.  $\left(\frac{x^4y^3}{-y^2 \cdot x^{-3}y^{-5}}\right)^0$

64.  $\frac{a^2b^3 \cdot -ba^{-1}}{(-a^{-2}b^{-4})^3}$

65.  $\left(\frac{x^3y^5 \cdot y^5}{-y^2 \cdot x^3y^{-5}}\right)^0$

66.  $\frac{-x^4y^2 \cdot (x^4 \cdot x^{-3}y^5)^2}{-x^3y^{-2}}$

$$67. -\frac{nm^{-2} \cdot -m^2n^5}{(m^{-5}n^2)^2}$$

$$68. \left(\frac{(xy^3)^2}{-x^3y^{-2} \cdot x^2y^2}\right)^{-5}$$

$$69. \frac{(ab^5)^{-3}b^5}{-b}$$

$$70. \left(\frac{v^0}{-u^2v^{-3} \cdot -u^{-3}v^3}\right)^{-1}$$

$$71. \frac{(-m^{-1})^3}{-nm^5 \cdot -m^0}$$

$$72. \left(\frac{-x^3y^{-1}}{-x^{-1}y^4 \cdot -xy^0}\right)^3$$

$$73. \frac{x^{-2}y^5 \cdot y^0}{(-y^5)^{-1}}$$

$$74. \left(\frac{-x^5y^0}{-y^{-3} \cdot -x^{-5}y^2}\right)^5$$

$$75. \left(-\frac{x^3 \cdot y^2 \cdot -y}{x^5y^2}\right)^2$$

$$76. \left(\frac{n^4}{-m^4n^5 \cdot -m^5}\right)^0$$

$$77. \left(\frac{x^4y^{-4} \cdot x^3y^3}{(-x^3y^0)^5}\right)^{-4}$$

$$78. \frac{(x^2)^0}{x^0y^5 \cdot xy^{-5}}$$

$$79. \left(\frac{(u^2)^3 \cdot -u^4v^5}{-v^4}\right)^{-4}$$

$$80. \left(\frac{x^4y^2 \cdot x^{-1}y^5}{y}\right)^{-4}$$