

EXPONENTS PRACTICE

Do not use a calculator. Write your answer using only positive exponents.

1. 2^4

2. 6^2

3. $(0.2395173)^0$

4. 0.5^2

5. 2^{-2}

6. 3^{-3}

7. $-(3^2)$

8. 95172^{-1}

9. 568^1

10. 7^{-2}

11. x^{-25}

12. y^{-2}

13. y^2y^3

14. x^3x^8

15. $x^{-6}x^9$

16. y^6x^{-2}

17. $(x^2y^6)(x^8y^4)$

18. $(x^{-2}y^{-1})(x^6y^{-2})$

19. $x(x^4y^7)$

20. $xy(a^2b^3y^7)$

21. $a^{12}b^{-2} \cdot a^{-2}b^5$

22. $x^3b^{-7} \cdot a^6b^{-4}$

23. $\frac{x^4}{x^2}$

24. $\frac{y^7}{y^9}$

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

26. $\frac{y^2x^7}{y^{-2}x^{-7}}$

27. $\frac{x^7y^8}{x^9y^{-4}}$

28. $\frac{x^2y^6z^8}{xy}$

29. $\frac{x^3y^5z^3}{z^7y^6x^3}$

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

31. $\left(\frac{1}{4}\right)^3$

32. $\left(\frac{6}{7}\right)^2$

33. $\left(\frac{8}{9}\right)^2$

34. $\left(\frac{x}{y}\right)^6$

35. $\left(\frac{y^3}{x^5}\right)^4$

36. $\left(\frac{2}{5}\right)^2$

37. $\left(\frac{x^2}{7}\right)^3$

38. $\left(\frac{2}{x^{-2}}\right)^5$

39. $\left(\frac{x^4}{y^7}\right)^{-8}$

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

41. $(x^2y)^3$

42. $(x^{-4}y^3)^7$

43. $x(x^{-2}y^6)^{-3}$

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

45. $\frac{x^{-3}}{y^{-3}}$

46. $x^{-2}y^4z^{-16}$

47. $\frac{x^{-4}y^2}{z^3a^{-4}}$

48. x^7y^{-7}

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

50. $\left(\frac{1}{4}\right)^{-2}$

51. $\left(\frac{x^{-2}}{y^2}\right)^{-4}$

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

53. $\left(\frac{y^{-10}}{x^{10}}\right)^{-12}$

54. $\left(\frac{x^{-3}y^7}{x^{-1}y^2}\right)^6$

55. $\left(\frac{x^{-5}y^{-7}}{y^6x^9}\right)^{-1}$

56. $\left(\frac{x^{-2}y^4z^0}{x^{-1}y^{-4}z^2}\right)^{-7}$

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

58. $(8^x)^y$

59. $(3^y)^2$

60. $(2^{7x})^4$

61. $(5^7y)^{3x}$

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

63. $\left(\frac{x^{-3}6^2}{8y^2}\right)^2$

64. $(9a)^2$

65. $(3y)^3$

66. $(x^ay^b \cdot x^by^a)^c$

67. $(x^{2a}y^b \cdot x^cy^{3a})^c$

68. $(x^2y^3)^4(x^2y^0)^3$