

Name: _____

Chapter 10 Test Study Guide



1. Evaluate -3^2

2. Evaluate 4^3

3. Evaluate $(-2)^4$

4. Explain why $-8^2 \neq (-8)^2$

5. Simplify $x^5 \cdot x^2$

6. Simplify $3y^4 \cdot 2y^4$

7. Simplify $(x^2)^3$

8. Simplify $(2x^5)^3$

9. Simplify $\frac{x^{12}}{x^3}$

10. Simplify $\frac{p^9}{p^3}$

11. Simplify $\frac{10y^8}{2y}$

12. Simplify $q \cdot q^3$



13. Evaluate -6^0

14. Evaluate $9^{-3} \cdot 9^3$

15. Rewrite using positive exponents $2f^{-2}$

16. Rewrite using positive exponents $\frac{1}{a^{-6}}$

17. Rewrite using positive exponents $4x^{-2}y^2$

18. Evaluate 4^{-2}

19. Write in standard form 4×10^5

20. Write in standard form 2×10^{-4}

21. Write 21,000,000 in scientific notation

22. Write 0.00002 in scientific notation

23. Explain why 0.3×10^{-4} is not written in proper scientific notation

24. Write $c \cdot c \cdot c \cdot d \cdot d \cdot d$ using exponents



25. Simplify $(7g)^2$

26. Simplify $\frac{k^5}{k^8} \cdot \frac{k^7}{k^2}$

27. Rewrite using positive exponents $x^2y^{-3}z^4$

28. Simplify $\frac{r^5}{r^9}$, express your answer using positive exponents

29. Evaluate $\left(\frac{1}{5}\right)^2$

30. Evaluate $6^{-5} \cdot 6^7$

31. Simplify $(t^2)^4$

32. Simplify $\frac{w^4 \cdot w^9}{w^5 \cdot w^8}$

33. Evaluate $(-2)^3$

34. Evaluate $2^{-3} \cdot 2^5$

35. Simplify $(n^5)^3 - (n^3)^5$

36. Rewrite using positive exponents $2a^{-1}b^2c^{-3}$
