

Questions — Topic: Powers of whole numbers (The zeroth power)

1. What is 7^0 ?
2. What is 1^0 ?
3. What is 10^0 ?
4. Evaluate 100^0 .
5. What is 2^0 ?
6. What is 9^0 ?
7. Evaluate 50^0 .
8. Find the value of 123^0 .
9. What is $5^0 + 4^0$?
10. What is $6^0 \times 3^0$?
11. Simplify $(2^0)^4$.
12. Simplify $(7^0)(8^0)(1^0)$.
13. Simplify $(5 \times 3)^0$.
14. Evaluate $(4^0) + (4^0) + (4^0)$.
15. Find the value of $11^0 - 1$.
16. Simplify $12^{(3-3)}$.
17. If x is a nonzero whole number, what is x^0 ?
18. Solve for x (whole-number solution): $x^0 = 1$.
19. How many whole numbers from 1 to 10 inclusive satisfy $n^0 = 1$?
20. True or false: For any whole number n , $n^0 = 0$. Explain your answer briefly.
21. Compare 0^3 and 3^0 . Which is larger?
22. Evaluate 0^2 and 2^0 . Write both values.
23. A math club gives each member 5^0 tokens for attending a meeting. If 12 members attend, how many tokens are given out in total?
24. A baker puts 7^0 sprinkles on each cupcake and bakes 8 cupcakes. How many sprinkles did the baker use?
25. A video game gives 9^0 bonus points for a small achievement. If a player gets that achievement 4 times, how many bonus points do they have?
26. A scientist writes the expression 20^0 to represent a normalized measurement. What number does this equal?
27. Write the missing number: $\underline{\hspace{1cm}}^0 = 1$ (give an example of a whole number that fits).
28. Fill in the blank: $15^0 + 0 = \underline{\hspace{1cm}}$.
29. Simplify: $(3^0 - 1) + (2^0 + 4^0)$.
30. If a and b are nonzero whole numbers, what is $a^0 \times b^0$ equal to?
31. Which is true: $1^0 = 0^1$ or $1^0 = 1$? Explain.
32. Simplify: $(6^0)^0$. (Be careful — treat the inner power first.)
33. If $n^0 = 1$ for all nonzero whole numbers n , how many whole numbers n between 1 and 100 inclusive satisfy $n^0 = 1$?
34. Is 0^0 included in the rule "any number to the zero power equals 1"? Explain briefly.
35. True or false: $(0 \times 5)^0 = 1$. Explain.
36. Simplify and compute: $8^0 + 8^0 + 8^0 + 8^0$.
37. Evaluate: $(2 \times 0 + 3)^0$.
38. A pattern lists these values: $4^3, 4^2, 4^1, 4^0$. Write the last value in the pattern.
39. Fill in the blank: $(10^0) \div (5^0) = \underline{\hspace{1cm}}$.
40. Evaluate: $(9^0)^{(5)}$.
41. If $p^3 = 125$ and p is a whole number, what is p^0 ?

42. A teacher writes the expression $(a^0)(b^0)(c^0)$ and tells students each letter is a nonzero whole number. What number do they get?
43. Simplify: $(1000^0) + (0^2)$.
44. Suppose $m^0 = 1$ and $n^0 = 1$ for nonzero whole numbers m and n . What is $m^0 + n^0$?
45. Evaluate: $(5^1 - 5^1) + 5^0$.
46. Fill in the blank: If $y \neq 0$ and y is a whole number, then $y^0 = \underline{\hspace{2cm}}$.
47. Simplify: $(7^0 + 3^0) \times 2$.
48. A factory labels each batch with code number 6^0 . If it produces 20 batches, what is the sum of the code numbers printed (add the code number for each batch)?
49. Which is larger: 2^0 or 0^0 ? Explain your answer.
50. A test asks: "List three different whole numbers a , b , c (nonzero) such that $a^0 + b^0 + c^0 = ?$ " Provide the sum.