

LOGARITHM

1. The value of $\log_{25} 625 - \log_{31} 961 + \log_{29} 841$ is
a) 0 b) 1 c) 2 d) 3
2. If $\log_5 2 = \log_3 m / \log_3 n$, then find the value of m and n
a) 1, 2 b) 2, 5 c) 5, 2 d) None of these
3. $3^{\log_5 25}$ is equal to?
a) 3 b) 1 c) 9 d) 2
4. If $\log_{10} 2 = 0.3010$, find the value of $\log_{10} 25$
a) 2 b) 0.39 c) 1.4 d) None of these
5. What is the value of $\log 375 + 2 \log \sqrt{5} - 3 \log \sqrt[3]{3}$? Given that, $\log 2 = 0.3012$, $\log 3 = 0.4771$ and $\log 5 = 0.6989$
a) 0.9 b) 4 c) 2 d) 3.5
6. The value of $\log_{abc} a^2 b^2 c^2$ is
a) 0 b) 2 c) 1 d) -1
7. Find the value of x in $\log_{11}(1000 + x) = 3$?
a) 210 b) 0 c) 331 d) 100
8. If $a=2$ and $b^2-ab=-1$, then what is the value of $\log_{(a+b)}(a^3 + b^3)$?
a) 0 b) 1 c) 2 d) 3
9. If $\log_y x$ is z , then what is the value of the log of x^{-3} to the base of y^{-1} ?
a) $-z$ b) $3z$ c) $-3z$ d) None of these

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10. If $\log x = \log 3 + 2 \log 2 - \frac{3}{4} \log 16$. The value of x is:
a) 1 b) $1/2$ c) 2 d) $3/2$
11. If $\log_{10} 3 = 0.477$, then the value of $\log_{10} 9$ is
a) 0.95 b) 1 c) 0.86 d) None of these
12. If $\log_{10} 4 = 0.6020$ and $\log_{10} 3 = 0.4771$, what is the value of $\log_{10} 12$?
a) 1.08 b) 0.28 c) 1 d) None of these
13. What is the value of x in the expression $\log(x^2 - 9) = \log 7 + \log(x + 3)$?
a) 3, 10 b) 5, 6 c) -3, 10 d) -5, 6
14. What if the value of $\log_3 1.5 + \log_3 6$?
a) 0 b) 1 c) 2 d) 1.5
15. The value of $\log_3 9 - \log_5 625 + \log_7 343$ is
a) 1 b) -1 c) 2 d) 3
16. The value of $\log \frac{9}{8} - \log \frac{27}{32} + \log \frac{3}{4} = ?$
a) 0 b) 1 c) 2 d) 3
17. If $\log_2 x + \log_4 x + \log_{64} x = 5$, find x
a) 2 b) 7 c) 8 d) 16
18. The value of 81 raised to the power $\log_9 81$ is
a) 2 b) 1651 c) 6561 d) None of these

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19. If $\log_8 x + \log_8 \frac{1}{6} = \frac{1}{3}$ then the value of x is:

- a) 12 b) 16 c) 18 d) 24

20. Find the value of $\log 1 + \log 2 + \log 3$

- a) 1 b) 6 c) $\log 3$ d) $\log 6$

21. What is the value of $\log 2205$? Given that $\log 5 = a$, $\log 7 = b$ and $\log 3 = c$

- a) $2b - a - 2c$ b) $a + 2b + 2c$ c) $2a - b + 2c$ d) $a - 2b + 2c$

22. Find 3^x by solving the expression $\log_5 [(3^{2x} + 4)/(3^x + 2)] = 1$

- a) 1, -6 b) -1, 6 c) 3, -2 d) -3, 2

23. Evaluate $\log_7 1512$

- a) $3 \log_7 6$ b) $3 \log_7 6 + 1$ c) $3 \log_7 2 + 3 \log_7 3 + \log 7$ d) 1

24. What is the value of $\log_3 \left(\frac{1}{9}\right) + \log_9 81$

- a) 2 b) -2 c) 0 d) 4

25. If $xy = x^x$, then $\frac{1}{\log_x y + 1} = ?$

- a) 1 b) x c) 0 d) $1/x$

26. If $\log_{10} 3 = 0.4771$, find the value of $\log_{10} 8.1$

- a) 0.7 b) 0.9 c) 1.1 d) 1.3

27. If $\log_{10} 3 = 0.4771$, find the value of $\log_{10} 81$

- a) 1.71 b) 1.91 c) 1.18 d) 0.47

28. The value of a in $\log_a 0.0196 = 2$

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- a) 0.14 b) 1.4 c) 0.7 d) 0.07

29. If $\log_8 64 + \log_5 1/125 + 2 \log_2 8 = x$, what is the value of x ?

- a) 0 b) 1 c) 5 d) 11

30. If $\log_{x^2}(81 - 24x) = 1$, solve for x

- a) 0 b) 1 c) 2 d) 3

31. If a, b, c is in G.P, then $\log_a d, \log_b d, \log_c d$ are in

- a) A. P b) G. P c) H. P d) None of these

32. If $\log_4 2 + \log_4 32$ is equal to

- a) 0 b) 4 c) 1 d) 3

33. One of the values of x in $\log_{(x+7)}(36x + 9) = 2$?

- a) 0 b) 1 c) 2 d) 3

34. Find the value of x in the expression $\log(2x+3) + \log(2x-3) = \log 55$?

- a) 2 b) 4 c) 3 d) 1

35. If $\log_5[\log_3(\log_2 x)] = 1$, then x is?

- a) 243 b) 2^{243} c) 3^{243} d) None of these



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