

(Review) Express the following as a fraction:

1. x^{-5}

2. 4^{-3}

Express the following using a fractional exponent:

3. $\sqrt[4]{x}$

4. $\sqrt[3]{9}$

Write the following in logarithmic form:

[Use log and ln, as needed]

5. $N = 2^6$

6. $y = 10^{-2/3}$

7. $81 = 3^4$

8. $\frac{1}{64} = 2^{-6}$

9. $5 = 25^{1/2}$

10. $1 = e^0$

Solve the following equations for the unknown: [Hint: Write in exponential form.]

11. $\log_6 x = 2$

12. $\log_5 N = 3$

13. $\log x = 0$

14. $\log_4 x = -1$

15. $\log_{27} K = \frac{2}{3}$

16. $\log_{16} x = 1$

Evaluate the following logarithms:

17. $\log_4 16$

18. $\log_{16} 16$

19. $\log_{16} 2$

20. $\log_{100} \frac{1}{100}$

21. $\log_5 125$

22. $\log_7 1$

Solve for the unknown:

23. $\log_a 64 = 2$

24. $\log_{49} x = \frac{1}{2}$

25. $\log \frac{1}{100} = N$

26. $\log_x 4 = \frac{1}{2}$

27. $\log_6 36 = x$

28. $\log_3 K = -3$

1. $\frac{1}{x^5}$

2. $\frac{1}{4^3} = \frac{1}{64}$

3. $x^{1/4}$

4. $9^{1/3}$

5. $\log_2 N = 6$

6. $\log y = -\frac{2}{3}$

7. $\log_3 81 = 4$

8. $\log_2 \frac{1}{64} = -6$

9. $\log_{25} 5 = \frac{1}{2}$

10. $\ln 1 = 0$

11. $x = 36$

12. $N = 125$

13. $x = 1$

14. $x = \frac{1}{4}$

15. $K = 9$

16. $x = 16$

17. 2

18. 1

19. $\frac{1}{4}$

20. -1

21. 3

22. 0

23. $a = 8$

24. $x = 7$

25. $N = -2$

26. $x = 16$

27. $x = 2$

28. $K = \frac{1}{27}$