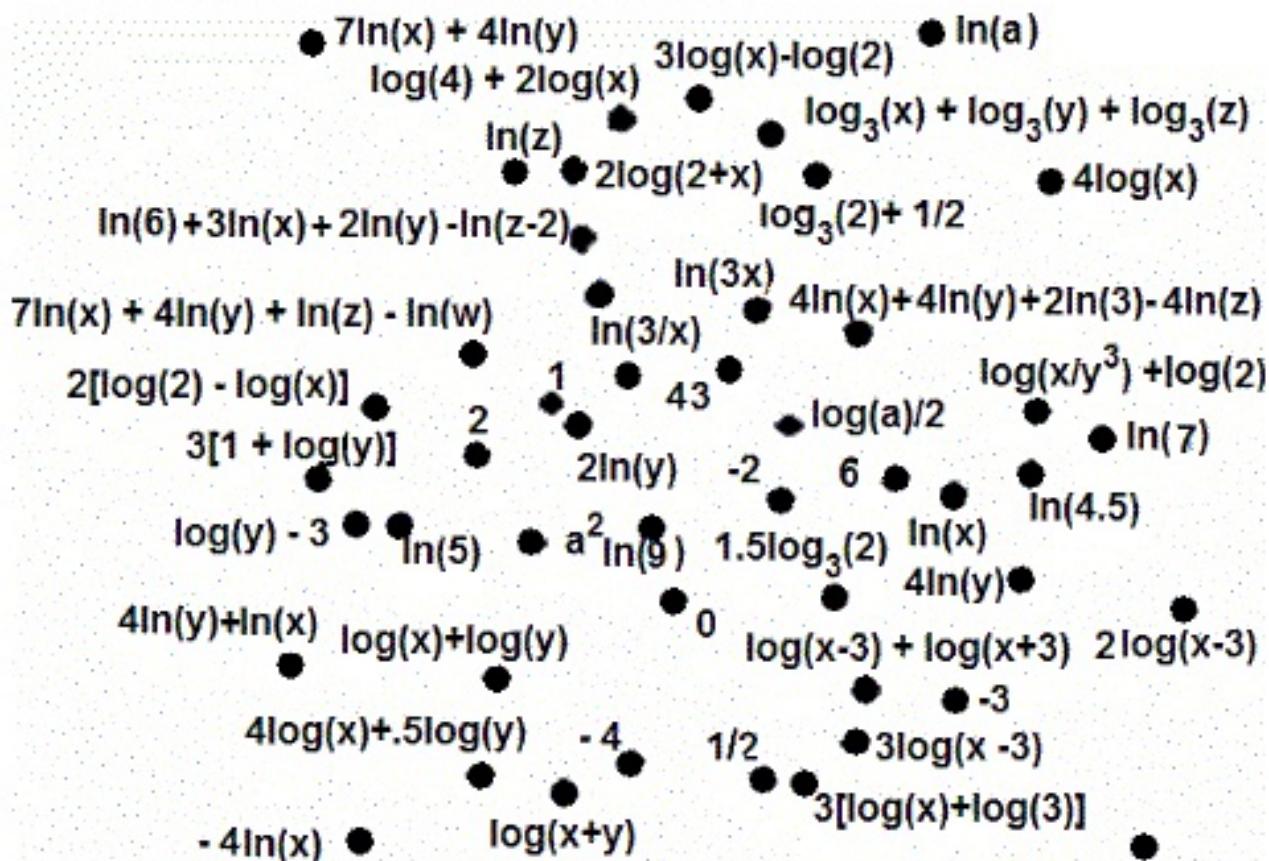


Name _____ color _____

Sweet Log Treat

Connect the answers in order.



Expand or simplify the log to complete the statement.

Start a new line.

1. $\log(\underline{\hspace{2cm}}) = 2\log(a)$

2. $\log(xy) = \underline{\hspace{2cm}}$

3. $\log(x^4 \sqrt{y}) = \underline{\hspace{2cm}}$

4. $\log(x+y) = \underline{\hspace{2cm}}$

5. $\log_3(1/81) = \underline{\hspace{2cm}}$

6. $\log_3(1) = \underline{\hspace{2cm}}$

7. $\log_3(\sqrt[3]{3}) = \underline{\hspace{2cm}}$

8. $\log(3x)^3 = \underline{\hspace{2cm}}$

9. $\log(x-3)^3 = \underline{\hspace{2cm}}$

10. $\log(x^2 - 9) = \underline{\hspace{2cm}}$

11. $\log_3(\sqrt[3]{2})^3 = \underline{\hspace{2cm}}$

12. $\log_2(1/4) = \underline{\hspace{2cm}}$

13. $\log(\sqrt{a}) = \underline{\hspace{2cm}}$

14. $\log_3(\sqrt[3]{81})^3 = \underline{\hspace{2cm}}$

15. $-\ln(1/x) = \underline{\hspace{2cm}}$

16. $2\ln(3) - \ln(8)/3 = \underline{\hspace{2cm}}$

17. $\log(x) - 3\log(y) + \log(4)/2 = \underline{\hspace{2cm}}$

18. $4\ln(xy) \sqrt{3/z} = \underline{\hspace{2cm}}$

19. $\ln(3) + \ln(x) = \underline{\hspace{2cm}}$

20. $\log_3(\sqrt[3]{12}) = \underline{\hspace{2cm}}$

21. $\log_3(xyz) = \underline{\hspace{2cm}}$

22. $\log(x^3 / \sqrt[3]{4}) = \underline{\hspace{2cm}}$

23. $\log(2x)^2 = \underline{\hspace{2cm}}$

24. $\log(2+x)^2 = \underline{\hspace{2cm}}$

25. $\ln(6x^3y^2 / (z-2)) = \underline{\hspace{2cm}}$

26. $\ln(3) - \ln(x) = \underline{\hspace{2cm}}$

27. $\ln(x^3(yx)^4 z/w) = \underline{\hspace{2cm}}$

28. $\log(2/x)^2 = \underline{\hspace{2cm}}$

29. $\log(10y)^3 = \underline{\hspace{2cm}}$

30. $\log(y/1000) = \underline{\hspace{2cm}}$

31. $\ln(5) = \underline{\hspace{2cm}}$

32. $\log_6(36) = \underline{\hspace{2cm}}$

33. $\log(10) = \underline{\hspace{2cm}}$

34. $\ln(y^2) = \underline{\hspace{2cm}}$

35. $\ln(e^{x^2}) = \underline{\hspace{2cm}}$