



Ecuaciones Exponenciales y Logarítmicas

1. $3^{x^2-2x} = 1$

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

3. $2^{2x} - 3 \cdot 2^x - 4 = 0$

4. $9^{x-1} = 3^{3x+1}$

5. $9^{x+3} = 3^{3x+5}$

6. $10^{x^2-11x+30} = 100$

7. $8^{x^2+3x+2} = 1$

8. $2^x \cdot 3^x = 216$

9. $2^{x-1} + 2^x + 2^{x+1} = 7$

10. $5^x + 5^{x-1} = 6$

11. $4^{x-2} - 2^{x+1} = -12$

12. $4^{x-1} + 2^{x+2} = 48$

13. $5^{2x+1} - 5^{x+2} = 2500$

14. $3^{x+1} + 3^x + 3^{x-1} = 39$

15. $9^x - 6 \cdot 3^{x+1} + 81 = 0$

16. $2^{x-1} + 2^{x-2} + 2^{x-3} + 2^{x-4} = 960$

17. $5^{2(x-1)} = 25^{\frac{x^2-1}{4}}$

18. $3^{x+1} - 2 \cdot 3^x - 2 \cdot 3^{x-1} = 81$

19. $4^x - 3^{x-\frac{1}{2}} = 3^{x+\frac{1}{2}} - 2^{2x-1}$

1. $\log(x) + \log(2) = 1$

2. $\log(x) - \log(3) = 1$

3. $\log x + \log 4 = \log(x+1) + \log 3$

4. $2 \log x = 4 + \log\left(\frac{x}{10}\right)$

5. $\log(2x) - \log(3) + \log x = 3$

6. $\log(x^2) - \log 3 = \log x - \log 5$

7. $2 \log x - \log(16) = \log \frac{x}{2}$

8. $2 \log((2x)^2) - 3 \log(x) = 1$

9. $(*) \log x - \log(3) = 2 \log(x-3)$

10. $(*) \log(x^2) - \log\left(x + \frac{11}{10}\right) = 1$

11. $(*) \log((x-2)^2) + \log((x+1)^2) = 2$

12. $(*) 3 \log(x) - \log(32) = 2 \log\left(\frac{x}{2}\right)$

13. $2 \log(x) + \log(x^2 + 2) = \log(3)$

14. $\frac{\log(35 - x^3)}{\log(5 - x)} = 3$

15. $\log(\sqrt{x}) - \log(\sqrt{2}) = \frac{1}{2}$

16. $\log(\sqrt[3]{x}) - \log(\sqrt[3]{4}) = \frac{1}{3}$

17. $\log(x^2 + 3x + 2) - \log(x^2 - 1) = \log(2)$

18. $(*) \frac{\log 2 + \log(11 - x^2)}{\log(5 - x)} = 2$

19. $\frac{\log(6x + 5) - \log 3 + \log x}{\log 2} = 1$

20. $\log(x-2) - 1 = \log 2 - \log(x-3)$

21. $\log(x-5^3) + \log(x-5) = 2 + \log(4-x)$

22. $\log(2x+4) + \log(3x+1) - \log 4 = 2 \log(8-x)$

23. $\log(2x-3) \log(5-x) = \log(5)$