RESUELVE LAS SIGUIENTES ECUACIONES:

1. \( \frac{x}{4} + 5 = \frac{2x}{5} - 2 - \frac{x}{30} \)
2. \( \frac{5x}{8} - 5 (x - 20) = \frac{-2x + 18}{6} \)
3. \( 3x - \frac{7-x}{8} = -1 + \frac{x+3}{4} + 2x \)
4. \( \frac{4x - 3}{6} - \frac{3x-1}{4} = \frac{4x-2}{3} - 1 \)
5. \( \frac{x-3}{3} - \frac{3(x-2)}{2} = x-3-(x+2) \)
6. \( \frac{x-3}{5} - \frac{x-3}{3} = \frac{x+3}{2} \)
7. \( x^2-7x+12=0 \)
8. \( x^2-9x+18=0 \)
9. \( x^2+8x+15=0 \)
10. \( x^2-6x+9=0 \)
11. \( 4x^2+4x=0 \)
12. \( 2x^2-18=0 \)
13. \( x^2-7x+15=0 \)
14. \( (x-3) (x-2) + \frac{x (x-3)}{2} = (x-2)^2 \)
15. \( x^4+5x^2+4=0 \)
16. \( x^4+2x^2-3=0 \)
17. \( x^6-9x^3+8=0 \)
18. \( x^6-26x^3-27=0 \)
19. \( x^4-4x^2=0 \)
20. \( \frac{x-1}{x+1} - \frac{3+x}{x} = 2 \)
21. \( \frac{x-1}{x+1} - \frac{3+x}{x-1} = 2 \)
22. \( x + \frac{1}{x - 2} = 4 \)
23. \( x + \frac{2}{x} = 3 \)
24. \( x (x+1) - \left( \frac{x+x}{2} \right) = 0 \)
25. \( \frac{3}{x} + \frac{1}{2 + \frac{x+1}{x-2}} = 1 \)
26. \( \frac{10}{x+5} + \frac{3+4x}{x+5} = \frac{3}{x+1} = \frac{x}{x-1} - 1 \)
27. \( \frac{x+2}{x-1} - \frac{x+3}{x+1} = \frac{2x+2}{x^2-1} \)
28. \( \frac{15}{x+10} - \frac{5}{x+2} = 0 \)
29. \( \frac{2}{x+1} + \frac{3x-3}{x^2-1} = \frac{2}{x-1} + \frac{7}{x+1} \)
30. \( \frac{5}{x-1} - \frac{3}{x+4} - \frac{3}{x^2+3x-4} = \frac{5}{x-1} \)
31. \( \frac{1}{x-a} + \frac{1}{x+a} = \frac{1}{x^2-a^2} \)
32. \( \frac{1 + \frac{x+1}{x-1}}{2 - \frac{x+1}{x-1}} = 2 \)
33. \( x + \sqrt{x} = 30 \)
34. \( \sqrt{x} + 1 = \sqrt{x} + 9 \)
35. \( \sqrt{7-3x} - x = 7 \)
36. \( \sqrt{x+4} = 3 - \sqrt{x-1} \)
37. \( \sqrt{4x+5} - \sqrt{3x+1} = 1 \)
38. \( \sqrt{2x-7} + \sqrt{x+4} = 6 \)
39. \( 2 \sqrt{x+4} = \sqrt{5x+4} \)
40. \( e^{x^2} = e^{2(x-1)} \)
41. \( 4^{x+1} = 2^{2x-3} \)
42. \( 2^{x-1} = 8^{x+3} \)
43. \( 3^{2x+1} - 9^{x+2} = -702 \)
44. \( 5^{3x-2} = 625 \)
45. \( 5^{x^2-6} = 1 \)
46. \( 3^{2x-1} - 3^{2x} = -54 \)
47. \(4^x - 2 \cdot x^2 = 32\)
48. \(3^{2 \cdot (x+2)} - 4 \cdot 3^x = 77 = 0\)
49. \(2^{2x} \cdot 3.2 \cdot x = 4 = 0\)
50. \(3^x + 3 \cdot x - 3 \cdot x^2 = 11\)
51. \(2^x + 2^x = \frac{65}{8}\)
52. \(\log x = \log 2\)
53. \(\log x = 3\)
54. \(\log_3 \left(32^2\right) = x\)
55. \(\log x = 2 \log 3\)
56. \(\log x - \log 10 = 2\)
57. \(4 \log_3 (2x - 5) = \log_3 81\)
58. \(\log_2 (x^2 + x + 2) = 2\)
59. \(\frac{\log 3x}{x - 2} = \log 0.1\)
60. \(\log_3 (3x - 1) - \log_3 (x + 1) = 2\)
61. \(\log_x \sqrt{x + 4} - \log(3x) = -2 \log 3\)
62. \(\ln x - \ln(x - 2) = \ln(4x - 3) - \ln 3\)
63. \(\ln (x - 1) - \ln (x^2 - 1) = \ln \left(\frac{1}{3}\right)\)
64. \(\ln \left(\frac{x + 1}{x}\right) + \ln 2 = \ln(x + 3)\)
65. \(\frac{3 (x + 1)}{4} - \frac{x + 3}{6} + x = 2x + \frac{3 - 7x}{12}\)
66. \(\frac{x + 2}{3} - \frac{(x - 2) (x + 2)}{2} = (x - 2)^2 - 4\)
67. \(\frac{x + 2}{3} + (3 - x) (x - 1) = (x - 2)^2\)
68. \((a + x) (b - x) - a (b + a) + x^2 + a^2 = \frac{b^2 - ab}{a}\)
69. \(\sqrt{x + 7} - \sqrt{2x} = 1\)
70. \((x^2 - 3x) \cdot (x^2 - 4) \cdot (x^2 + 1) \cdot (3x + 2) = 0\)
71. \(\frac{3 (x + 1)}{4} - \frac{x + 3}{6} + x = 2x + \frac{3 - 7x}{12}\)
72. \((x - 2) x - \frac{x + 2}{3} = \frac{(x - 2) (x + 2)}{2} = (x - 2)^2 - 4\)
73. \((x - 3) \cdot \frac{x + 2}{3} + (3 - x) (x - 1) = (x - 2)^2\)
74. \((a + x) (b - x) - a (b + a) + x^2 + a^2 = \frac{b^2 - ab}{a}\)
75. \(\sqrt{x + 7} - \sqrt{2x} = 1\)
76. \((x^2 - 3x) \cdot (x^2 - 4) \cdot (x^2 + 1) \cdot (3x + 2) = 0\)
77. \(\frac{1}{x - 2} + \frac{5}{x + 2} = 2\)
78. \(\ln(x^2 + 2) - \ln(x + 1) = \ln(2 - x)\)
79. \(3 \log x - 2 \log 2 = \log(x^2) - \log 2\)
80. \(\sqrt{2x - 1} + \sqrt{x + 4} = 6\)
81. \(5^{2(x+1)} - 5^{x+3} + 1 = 5^x\)
82. \(3x + 3x^{x+1} = 12\)
83. \(2^{x+3} + 4^{x+1} - 320 = 0\)
84. \(2 \log x = 2 + \log x\)
85. \(\log(3x + 1) - \log(2x - 3) = \log 2\)
86. \(|x + 3| = 2x - 1\)
87. \(|x + 1| = x + 2\)
88. \(\log(x + 7) - \log(x - 2) = 1\)