



Práctica de ecuaciones polinomiales y fraccionarias

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1. $x^4 + 3x^2 - 54 = 0$ $\mathbb{R}/ \{-\sqrt{6}, \sqrt{6}\}$
2. $x^2 - 2x^2 - 5x + 10 = 0$ $\mathbb{R}/ \{\frac{1}{2}\sqrt{65} - \frac{5}{2}, -\frac{1}{2}\sqrt{65} - \frac{5}{2}\}$
3. $x^3 - 4x^2 - 5x = -20$ $\mathbb{R}/ \{-\sqrt{5}, \sqrt{5}, 4\}$
4. $x^3 = -3x^2 + 54$ $\mathbb{R}/ \{3\}$
5. $x^3 - 9x^2 + 33x - 65 = 0$ $\mathbb{R}/ \{5\}$
6. $x^5 - 2x^4 + 2x^3 - 4x^2 - 63x + 126 = 0$ $\mathbb{R}/ \{2, -\sqrt{7}, \sqrt{7}\}$
7. $x^3 - x^2 - 5x - 3 = 0$ $\mathbb{R}/ \{-1, 3\}$
8. $x^4 - 8x^2 + 15 = 0$ $\mathbb{R}/ \{\sqrt{5}, -\sqrt{5}, \sqrt{3}, -\sqrt{3}\}$
9. $x^3 + 9x^2 - 21x + 11 = 0$ $\mathbb{R}/ \{1, -11\}$
10. $\frac{1}{n^2} = \frac{1}{3n^2} + \frac{2}{3n}$ $\mathbb{R}/ \{1\}$
11. $\frac{1}{m^2} = \frac{1}{m} + \frac{4}{m^2}$ $\mathbb{R}/ \{-3\}$
12. $1 = \frac{1}{6} + \frac{6}{x}$ $\mathbb{R}/ \{\frac{36}{5}\}$
13. $\frac{1}{3p} = \frac{1}{6p^2} - \frac{1}{6p}$ $\mathbb{R}/ \{\frac{1}{3}\}$
14. $\frac{2}{x} = \frac{1}{x^2} + \frac{x-5}{x^2}$ $\mathbb{R}/ \{-4\}$
15. $\frac{x+5}{3x} = \frac{1}{3x} + 1$ $\mathbb{R}/ \{2\}$

16. $\frac{1}{a^3} = \frac{4}{a^2} + \frac{1}{a}$ $\mathbb{R}/ \{-\sqrt{5} - 2, \sqrt{5} - 2\}$
17. $\frac{5}{2x} + \frac{x-4}{x} = \frac{1}{2}$ $\mathbb{R}/ \{3\}$
18. $\frac{1}{x} = \frac{1}{3x} + \frac{x-1}{x}$ $\mathbb{R}/ \{\frac{5}{3}\}$
19. $\frac{1}{8v+1} + 1 = \frac{8}{8v+1}$ $\mathbb{R}/ \{\frac{3}{4}\}$
20. $\frac{x-1}{x+1} = \frac{x^2-16x+64}{x^2+x} - \frac{1}{x^2+x}$ $\mathbb{R}/ \{\frac{21}{5}\}$
21. $\frac{4}{3x^2-3x} + \frac{x+4}{3x} = \frac{8}{3}$ $\mathbb{R}/ \{\frac{11}{7}\}$
22. $\frac{r^2+9r+14}{r^3-r^2-2r} - \frac{1}{r^3-r^2-2r} = \frac{r+5}{r^2-2r}$ $\mathbb{R}/ \{-\frac{8}{3}\}$
23. $1 = \frac{m+2}{m^2-m} + \frac{1}{m^2-m}$ $\mathbb{R}/ \{-1, 3\}$
24. $1 + \frac{a^2+6a-7}{a^2+6a-16} - \frac{1}{a+8}$ $\mathbb{R}/ \{-7, \frac{3}{2}\}$
25. $\frac{n-2}{n-8} - \frac{n+8}{n-8} = \frac{6n+24}{n^2-16n+64}$ $\mathbb{R}/ \{\frac{7}{2}\}$
26. $\frac{b^2-4b-12}{2b} = b+5 + \frac{1}{2b}$ $\mathbb{R}/ \{-13, -1\}$
27. $\frac{1}{n^2+6n-7} = 1 + \frac{n^2+16n+64}{n^2+6n-7}$ $\mathbb{R}/ \{-4\}$