

## Ecuaciones Bicuadradas

| ECUACIÓN                                    | SOLUCIÓN                                         | ECUACIÓN                                   | SOLUCIÓN                                            |
|---------------------------------------------|--------------------------------------------------|--------------------------------------------|-----------------------------------------------------|
| 1) $x^4 - 25x^2 + 144 = 0$                  | $(x = \pm 4, \pm 3)$                             | 2) $4x^4 + 19x^2 - 5 = 0$                  | $(x = \pm 1/2)$                                     |
| 3) $x^4 - 29x^2 + 100 = 0$                  | $(x = \pm 5, \pm 2)$                             | 4) $9x^4 - 40x^2 + 16 = 0$                 | $\left(x = \pm 2, \pm \frac{2}{3}\right)$           |
| 5) $x^4 - 13x^2 + 36 = 0$                   | $(x = \pm 2, \pm 3)$                             | 6) $x^4 + 4x^2 + 3 = 0$                    | ( No tiene )                                        |
| 7) $x^4 + 5x^2 + 4 = 0$                     | (No tiene)                                       | 8) $2x^4 - 3x^2 - 20 = 0$                  | $(x = \pm 2)$                                       |
| 9) $4x^4 - 37x^2 + 9 = 0$                   | $(x = \pm 3, x = \pm 0'5)$                       | 10) $x^4 - 8x^2 - 9 = 0$                   | $(x = \pm 3)$                                       |
| 11) $x^4 - 24x^2 - 25 = 0$                  | $(x = \pm 5)$                                    | 12) $x^4 - 5x^2 + 4 = 0$                   | $(x = \pm 2, x = \pm 1)$                            |
| 13) $2x^4 - x^2 + 1 = 0$                    | ( no tiene )                                     | 14) $2x^4 + 9x^2 = 68$                     | $(x = \pm 2)$                                       |
| 15) $x^4 + 3x^2 - 10 = 0$                   | $\left(x = \pm \sqrt{2}\right)$                  | 16) $36x^4 - 13x^2 + 1 = 0$                | $\left(x = \pm \frac{1}{2}, \pm \frac{1}{3}\right)$ |
| 17) $9x^4 + 16 = 40x^2$                     | $\left(x = \pm 2, \pm \frac{2}{3}\right)$        | 18) $4x^4 - 5x^2 + 1 = 0$                  | $\left(x = \pm 1, \pm \frac{1}{2}\right)$           |
| 19) $x^4 - 5x^2 - 36 = 0$                   | $(x = \pm 3)$                                    | 20) $x^4 + x^2 + 1 = 0$                    | ( no tiene)                                         |
| 21) $x^4 - 10x^2 + 9 = 0$                   | $(x = \pm 3, x = \pm 1)$                         | 22) $x^4 - 16 = 0$                         | $(x = \pm 2)$                                       |
| 23) $x^4 - 9x^2 = 0$                        | $(x = 0, x = \pm 3)$                             | 24) $9x^4 + 5x^2 - 4 = 0$                  | $\left(x = \pm \frac{2}{3}\right)$                  |
| 25) $3x^4 - 26x^2 - 9 = 0$                  | $(x = \pm 3)$                                    | 26) $4x^4 - 17x^2 + 4 = 0$                 | $(x = \pm 2, x = \pm 0'5)$                          |
| 27) $x^4 + 2x^2 - 3 = 0$                    | $(x = \pm 1)$                                    | 28) $2x^4 - x^2 - 1 = 0$                   | $(x = \pm 1)$                                       |
| 29) $x^4 - 3x^2 + 2 = 0$                    | $\left(x = \pm 1, x = \pm \sqrt{2}\right)$       | 30) $4x^4 - 13x^2 + 9 = 0$                 | $\left(x = \pm \frac{3}{2}, x = \pm 1\right)$       |
| 31) $x^4 - 7x^2 + 12 = 0$                   | $\left(x = \pm \sqrt{3}, \pm 2\right)$           | 32) $3x^4 + x^2 - 4 = 0$                   | $(x = \pm 1)$                                       |
| 33) $8x^4 - x^2 - 7 = 0$                    | $(x = \pm 1)$                                    | 34) $5x^4 - 6x^2 - 351 = 0$                | $(x = \pm 3)$                                       |
| 35) $(x^2 - 4)(x^2 + 1) = 0$                | $(x = \pm 2)$                                    | 36) $(x^2 - 5)(x^2 - 3) = 0$               | $\left(x = \pm \sqrt{3}, \pm \sqrt{5}\right)$       |
| 37) $(x^2 - 3)(9x^2 - 25) = 0$              | $\left(x = \pm \sqrt{3}, \pm \frac{5}{3}\right)$ | 38) $(x^2 - 1)(4x^2 - 9) = 0$              | $\left(x = \pm 1, \pm \frac{3}{2}\right)$           |
| 39) $\frac{x^2(x^2 - 9)}{20} + 1 = x^2 - 4$ | $(x = \pm 5, \pm 2)$                             | 40) $x^2 + \frac{10}{x^2} = 7$             | $\left(x = \pm \sqrt{2}, \pm \sqrt{5}\right)$       |
| 41) $\frac{x^2}{x+2} = \frac{2-x}{x^2+2}$   | $(x = \pm 1)$                                    | 42) $\frac{12x^2+8}{2x^2+4} = 8x^2+6$      | No tiene                                            |
| 43) $\frac{2}{x^2-9} = \frac{x^2-16}{72}$   | $(x = \pm 5, 0)$                                 | 44) $\frac{x^2-32}{4} = \frac{-28}{x^2-9}$ | $(x = \pm 5, \pm 4)$                                |
| 45) $34 - x^2 = \frac{225}{x^2}$            | $(x = \pm 5, \pm 3)$                             | 46) $x^2 = \frac{12}{x^2+1}$               | $\left(x = \pm \sqrt{3}\right)$                     |