

Risolvi le seguenti equazioni di grado superiore al secondo di vario tipo

1	$x^3 + 27 = 0$	$-3$
2	$27x^3 + 1 = 0$	$-\frac{1}{3}$
3	$32x^5 - 1 = 0$	$\frac{1}{2}$
4	$64x^6 + 1 = 0$	$\emptyset$
5	$27x^6 - 64 = 0$	$\pm \frac{2\sqrt{3}}{3}$
6	$36x^2 - 81 = 0$	$\pm \frac{3}{2}$
7	$4x^5 - 2 = 0$	$\sqrt[5]{\frac{1}{2}}$
8	$x^4 - 4 = 0$	$\pm\sqrt{2}$
9	$x^4 - 16x^2 = 0$	$\pm 4; 0; 0$
10	$(x^2 - 1)(x^2 - 9) = 0$	$\pm 1; \pm 3$
11	$x^3 - 3x^2 - 3x + 9 = 0$	$\pm\sqrt{3}; 3$
12	$x^5 - 3x^4 - 3x^3 = 0$	$\frac{3 \pm \sqrt{21}}{2}; 0; 0; 0$
13	$x^3 + 3x^2 + 3x + 1 = 0$	$-1; -1; -1$
14	$x^3 + 3x^2 - x - 3 = 0$	$\pm 1; -3$
15	$3x^3 - 5x^2 + 2x = 0$	$0; 1; \frac{2}{3}$
16	$2x^4 - 5x^3 - 18x^2 + 45x = 0$	$\pm 3; 0; \frac{5}{2}$
17	$x^3 - 9x^2 - 4x + 36 = 0$	$\pm 2; 9$
18	$x^4 - 5x^3 + 2x^2 + 20x - 24 = 0$	$-2; 3; 2; 2$
19	$6x^3 - 7x^2 - x + 2 = 0$	$1; -\frac{1}{2}; \frac{2}{3}$

20	$x^3 - 2x + 1 = 0$	$1; \frac{-1 \pm \sqrt{5}}{2}$
21	$3x^3 - 4x^2 + 1 = 0$	$1; \frac{1 \pm \sqrt{13}}{6}$
22	$x^3 - 2x - 21 = 0$	3
23	$6x^4 - 13x^3 - 3x^2 + 12x - 4 = 0$	$-1; 2; \frac{1}{2}; \frac{2}{3}$
24	$2x^4 - 3x^3 - 12x^2 + 7x + 6 = 0$	$1; -\frac{1}{2}; -2; 3$
25	$8x^4 - 12x^3 + 6x^2 - x = 0$	$0; \frac{1}{2}; \frac{1}{2}; \frac{1}{2}$
26	$x^4 - x^3 - x^2 - x - 2 = 0$	$-1; 2$
27	$x^4 - 2x^3 - 7x^2 + 20x - 12 = 0$	$-3; 1; 2; 2$
28	$x^3 - 6x^2 + 11x - 6 = 0$	$1; 2; 3$
29	$8x^6 - 7x^3 - 1 = 0$	$-\frac{1}{2}; 1$
30	$x^8 - 5x^4 + 4 = 0$	$\pm\sqrt{2}; \pm 1$
31	$5x^3 - 21x^2 - 21x + 5 = 0$	$-1; \frac{1}{5}; 5$
32	$6x^4 - 5x^3 - 38x^2 - 5x + 6 = 0$	$-2; -\frac{1}{2}; \frac{1}{3}; 3$
33	$6x^3 + 7x^2 - 7x - 6 = 0$	$-\frac{3}{2}; -\frac{2}{3}; 1$
34	$3x^4 - 10x^3 + 10x - 3 = 0$	$-1; \frac{1}{3}; 1; 3$
35	$(x^2 - 3)^6 + 13(x^2 - 3)^3 + 40 = 0$	$\pm 1; \pm\sqrt{3 - \sqrt[3]{5}}$
36	$2(x^2 - 1)(x^2 + 3) + 7x = 7x^3$	$\pm 1; 2; \frac{3}{2}$
37	$(x^2 - 1)^2 - x^2 + 2x - 1 = 0$	$0; -2; 1$

38	$\frac{x^2 - 3x}{2x} - \frac{x - 2}{x - 1} = 0$	$3 \pm \sqrt{2}$
38	$\frac{4}{x^3 + 1} - \frac{4x^3 + 3}{x^6 - 1} = 8$	$\pm \sqrt{\frac{1}{2}}$
40	$x^4 - 25x^2 + 144 = 0$	$\pm 3; \pm 4$
41	$4x^4 - 12x^2 - 16 = 0$	$\pm 2$
42	$9x^4 - 8x^2 - 1 = 0$	$\pm 1$
43	$x^4 - 10x^2 + 9 = 0$	$\pm 1; \pm 3$
44	$x^4 - 7x^2 + 1 = 0$	$\pm \frac{1}{2}(3 + \sqrt{5}); \pm \frac{1}{2}(\sqrt{5} - 3)$
45	$x^4 - 5x^2 + 4 = 0$	$\pm 1; \pm 2$
46	$4x^4 - 13x^2 + 9 = 0$	$\pm 1; \pm \frac{3}{2}$
47	$4x^4 - 15x^2 - 4 = 0$	$\pm 2$
48	$\frac{1}{2} - \frac{3}{2}x^2 + x^4 = 0$	$\pm \sqrt{\frac{1}{2}}; \pm 1$
49	$16x^4 - 40x^2 + 9 = 0$	$\pm \frac{1}{2}; \pm \frac{3}{2}$
50	$x^4 - 13x^2 + 36 = 0$	$\pm 2; \pm 3$
51	$x^4 + 4x^2 - 5 = 0$	$\pm 1$
52	$25x^4 - 34x^2 + 9 = 0$	$\pm \frac{3}{5}; \pm 1$
53	$x^4 - 11x^2 + 18 = 0$	$\pm \sqrt{2}; \pm 3$
54	$x^4 + (2\sqrt{2} - 8)x^2 + 15 - 10\sqrt{2} = 0$	$\pm(\sqrt{2} - 1); \pm\sqrt{5}$

55	$x^4 - 5x^2 - 14 = 0$	$\pm\sqrt{7}$
56	$4x^4 - 17x^2 + 4 = 0$	$\pm\frac{1}{2}; \pm 2$
57	$x^4 - 17x^2 + 16 = 0$	$\pm 1; \pm 4$
58	$4x^4 - 41x^2 + 45 = 0$	$\pm\frac{\sqrt{5}}{2}; \pm 3$
59	$4x^4 + 11x^2 - 45 = 0$	$\pm\frac{3}{2}$
60	$x^4 - \frac{5 - 2\sqrt{3}}{4}x^2 + \frac{4 - 2\sqrt{3}}{16} = 0$	$\pm\frac{\sqrt{3}-1}{2}; \pm\frac{1}{2}$
61	$(x^2 - 2)^2 - 4x^2 + 11 = 0$	$\pm\sqrt{3}; \pm\sqrt{5}$