Equazioni irrazionali

PASSED

1	$\sqrt{1-3x}=8$	-21
2	$\sqrt{7x+2}=\frac{9}{4}$	$\frac{7}{16}$
3	$\sqrt{1-x}=-1$	*Impossibile*
4	$2\sqrt{-x^2+4-8x}=1$	$\frac{-8\pm\sqrt{79}}{2}$
5	$\sqrt[3]{x-4}=2$	12
6	$2\sqrt[3]{x-3}+1=5$	11
7	$\sqrt[3]{13x-5}=5$	10
8	$\sqrt[3]{3x-5}=1$	2
9	$\sqrt{x-3}=5-x$	4
10	$\frac{\sqrt{6x+1}+3}{2}=x$	4
11	$\sqrt{10-x}=2x+8$	$-\frac{9}{4}$
12	$\sqrt{x^2+x+2}=\frac{x+3}{2}$	$-\frac{1}{3}$; 1
13	$\sqrt{x+1}=x-1$	3
14	$1+\sqrt{x^2+3}=3x$	1

15	$\sqrt{4x^2-7x-6}=9-2x$	3
16	$\sqrt{41-x^2}+1=x$	5
17	$\sqrt{x(2+x)}+2=4-x$	$\frac{2}{3}$
18	$x+\sqrt{2x-x^2}=7$	*impossibile*
19	$3x+\sqrt{6x+4}=38$	10
20	$4x+\sqrt{5+4x}=7$	1
21	$x-17=\sqrt{169-x^2}$	*impossibile*
22	$x+\sqrt{5(x+2)}=8$	3
23	$2\sqrt{5-4x}+4x=5$	$\frac{1}{4}$; $\frac{5}{4}$
24	$\sqrt{3x-5}+3=x$	7
25	$\sqrt{4x^2+7x-2}=x+2$	-2; 1
26	$\sqrt{4x^2-7x-6}=9-2x$	3
27	$3x+\sqrt{9x^2-46x}=10$	*impossibile*

28	$\sqrt{2x+5} = 3(x-1)$	2
29	$\sqrt{x^2+3x-6} = 2x-6$	7
30	$\sqrt{x^2-11}+1 = x$	6
31	$\sqrt{x^2-1} = x+2$	$-\frac{5}{4}$
32	$4+x-\sqrt{x^2-5x+4} = 2x$	4
33	$\sqrt{16-x^2} = \frac{x}{2}+2$	$-4;\ \frac{12}{5}$
34	$\sqrt{x-2}+5 = 5x$	*impossibile*
35	$5x-12\sqrt{x}+7 = 0$	$1;\ \frac{49}{25}$
36	$3\sqrt{3x}-3 = 2\sqrt{3x}$	3
37	$\sqrt{\frac{1}{5}x(3x-1)} = -\frac{2}{7}(1+3x)$	-5
38	$\sqrt[3]{x^3-5x-4} = x-1$	$-\frac{1}{3};\ 3$
39	$\sqrt[3]{x^3+2x^2-1} = x+1$	$-2;\ -1$

40	$\sqrt[3]{8x^3+20x+7}=2x+1$	$-\frac{1}{3};\quad \frac{3}{2}$
41	$\sqrt[3]{3x-4}\ \sqrt[3]{9x^2-5x+1}=3x-2$	$\frac{1}{3};\quad 4$
42	$\sqrt{3(x^2-4)}=\sqrt{5x}$	3
43	$\sqrt{4-3x}-\sqrt{x^2-x-1}=0$	$-1-\sqrt{6}$
44	$\sqrt{2x^2-x-7}=\sqrt{x^2-3x-8}$	*impossibile*
45	$\sqrt{3-2x-x^2}=\sqrt{x^2-5x+4}$	$\frac{1}{2};\quad 1$
46	$\sqrt{36+x}=18-\sqrt{x}$	64
47	$\sqrt{2x-18}=3+\sqrt{x}$	81
48	$\sqrt{3x+28}=5+\sqrt{x-3}$	$7;\quad 12$
49	$\sqrt{32+x}-\sqrt{x-4}=2$	68
50	$\sqrt{x+4ab}-\sqrt{x}=2a$	$(b-a)^2$
51	$\sqrt{2x-3a}=3\sqrt{a}-\sqrt{2x}$	$2a$
52	$\sqrt{3x-5}-\sqrt{2x-5}=1$	$3;\quad 7$

53	$\sqrt{x-8}-10=-\sqrt{x-28}$	44
54	$\sqrt{2x+1}+1=2\sqrt{x-1}$	$2(2+\sqrt{2})$
55	$\sqrt{x-8}-10=\sqrt{x-28}$	*impossibile*
56	$\sqrt{1+3x}-1=\sqrt{2x-1}$	1; 5
57	$2\sqrt{x+16}-\sqrt{x-16}=10$	20; $\frac{340}{9}$
58	$\sqrt{x+2}-\sqrt{x-3}-1=0$	7
59	$\sqrt{x+1}-\sqrt{x+6}=-1$	3
60	$\sqrt{x+7}-2=\sqrt{x-1}$	2
61	$\sqrt{3-2x}=2-\sqrt{x^2+3}$	*impossibile*
62	$\sqrt{x+3}-2=\sqrt{x-5}$	6
63	$\sqrt[3]{3-x}+\sqrt[3]{x-2}=1$	2; 3
64	$\sqrt[3]{2x-28}-\sqrt[3]{2x+28}=-2$	± 18
65	$\sqrt[3]{2-3x}=-\sqrt[3]{3x+7}+3$	-2; $\frac{1}{3}$

66	$\sqrt[3]{x-3}+\sqrt[3]{2x+4}=1$	2
67	$\sqrt[3]{3x^2-5x+8}=\sqrt[3]{2x^2+2}$	2: 3
68	$\sqrt[4]{3x^2-2x+25}=\sqrt{3-2x}$	$5-\sqrt{41}$
69	$\sqrt[3]{x-2}+\sqrt[3]{2x-1}=0$	1
70	$\sqrt{3-x}+\sqrt{1-x}=\sqrt{4-2x}$	1
71	$\sqrt{x+1}+\sqrt{x+6}=\sqrt{2x+7}$	-1
72	$\sqrt{x-2}+\sqrt{3x-1}=2\sqrt{\frac{x}{2}+2}$	$\frac{-4+11\sqrt{2}}{4}$
73	$\sqrt{x+5}-\sqrt{x}=\sqrt{2x-7}$	4
74	$\sqrt{x+2}=\sqrt{6-x}-\sqrt{5-x}$	$\frac{5-2\sqrt{55}}{5}$
75	$\sqrt{2x+6}=\sqrt{x+2}-\sqrt{x-2}$	*impossibile*
76	$\sqrt{x+1}+\sqrt{x}=\sqrt{2x}+1$	0; 1
77	$\sqrt{2x-2}=\sqrt[4]{3x^2+5x+4}$	13
78	$\sqrt[6]{3-3x}-\sqrt[3]{3x-1}=0$	$\frac{2}{3}$

79	$\sqrt{3-2x}=\sqrt[4]{3x^2-2x+25}$	$5-\sqrt{41}$
80	$\sqrt[3]{\frac{x+1}{x-1}}=2$	$\frac{9}{7}$
81	$\frac{\sqrt{2}+\sqrt{x}}{\sqrt{2}-\sqrt{x}}=1$	0