**Iracionální rovnice a nerovnice:**

1. $\sqrt{2x-3}+\sqrt{4x+2}=4$ 2
2. $\sqrt{3x+1}-\sqrt{x+4}=1$ 5
3. $\sqrt{2x+6}-\sqrt{x+1}=2$ -1;15
4. $\sqrt{x+5}-\sqrt{x}=1$ 4
5. $\sqrt{x-9}+\sqrt{x-16}=7$ 25
6. $4\sqrt{8-x}-\sqrt{6x+150}=0$ -1
7. $\sqrt{7-2\sqrt{x}}=\sqrt{18-13\sqrt{x}}$ 1
8. $\sqrt{2x+1}+\sqrt{x-3}=2\sqrt{x}$ 4
9. $\sqrt{x+1}+\sqrt{4x+13}=\sqrt{3x+12}$ -1
10. $\sqrt{x+2}-\sqrt{2x-3}=\sqrt{4x-7}$ 2
11. $\sqrt{4+2x-x^{2}}=x-2$ 3
12. $\sqrt{5-x^{2}}=x-1$ 2
13. $\sqrt{9x^{2}-6x+16}-2=3x$ $\frac{2}{3}$
14. $\frac{\sqrt{x+13}+2}{\sqrt{x+13}-4}=7$ 12
15. $\sqrt{1+x\sqrt{x^{2}+24}}=x+1$ 0;5
16. $\sqrt{x^{2}+2x-3}<1$ $\left(-1\right.-\sqrt{5};\left.3\right⟩∪\left⟨1;\left.\sqrt{5}-1\right)\right.$
17. $\sqrt{3x-x^{2}}<4-x$ $\left⟨0;\left.3\right⟩\right.$
18. $\sqrt{2x-x^{2}}<5-x$ $\left⟨0;\left.2\right⟩\right.$
19. $2x+3<\sqrt{x^{2}+5x+6}$ $\left(-\infty ;\left.-3\right⟩∪\left(-2;\left.\frac{\sqrt{13}-7}{6}\right)\right.\right.$
20. $4-x<\sqrt{2x-x^{2}}$ $∅$
21. $\sqrt{11-5x}>x-1$ $\left(-\infty ;\left.2\right)\right.$
22. $x-1<\sqrt{7-x}$ $\left(4;\left.5\right)\right.$
23. $\sqrt{x^{2}-4x}>x-3$ $\left(-\infty ;\left.0\right⟩\right.∪\left(\frac{9}{2};\left.\infty \right)\right.$
24. $\sqrt{8+2x-x^{2}}>6-3x$ $\left(1;\left.4\right⟩\right.$
25. $\sqrt{-x^{2}+6x-5}>8-2x$ $\left(3;\left.5\right⟩\right.$