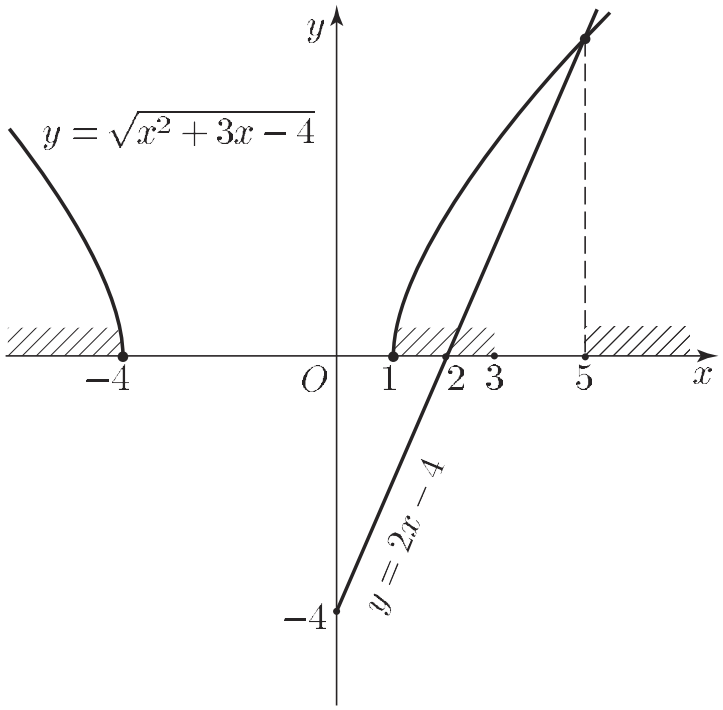

Рис. 22.6

Задачи

Решить неравенство (1–26):

1. $\sqrt{4 + 3x - x^2} > \frac{\sqrt{6}}{5} - \frac{1}{2}$.

2. $\sqrt{x^2 - 2x - 3} < \frac{\sqrt{7}}{8} - \frac{1}{3}$.

3. $(x + 1)\sqrt{4 - x^2} \leqslant 0$.

4. $\sqrt{2x + 1} > \sqrt{3 - x}$.

5. $\sqrt{x^2 - 3x - 4} < x - 2$.

6. $\sqrt{x^2 - 3x + 2} > x + 3$.

7. $3\sqrt{6 + x - x^2} > 4x - 2$.

8. $\sqrt{x^2 - 4x} > x - 3$.

9. $\sqrt{x + 1} - \sqrt{x} < \sqrt{x - 1}$.

10. $\sqrt{x + 3} < \sqrt{7 - x} + \sqrt{10 - x}$.

11. $\frac{x^2 - 13x + 40}{\sqrt{19x - x^2 - 78}} \leqslant 0$.

12. $\frac{\sqrt{2x^2 + 7x - 4}}{x + 4} < \frac{1}{2}$.

13. $\sqrt{3 - x} > |x + 3|$.

14. $\sqrt{x^2 - x + 1} > 1 + x - x^2$.

15. $\frac{\sqrt{1 - x^3} - 1}{1 + x} \leqslant x$.

16. $\frac{4x^2 - 9}{\sqrt{3x^2 - 3}} \leqslant \frac{2}{3}x + 1$.

17. $\sqrt[3]{x - 3} < 2 + \sqrt[3]{x + 5}$.

18. $\sqrt{x^4 - 2x^2 + 1} > 1 + x$.

19. $\sqrt{2x^2 - 7x - 4} > -x - \frac{1}{4}$.

20. $\frac{13 - 6x + \sqrt{4x^2 - 2x - 6}}{5 - 2x} > 1$.

21. $\sqrt{x^2 + 4x + 3} < 1 + \sqrt{x^2 - 2x + 2}$.

22. $\frac{2x + 15 - x^2}{\sqrt{2x + 15} + x} \geqslant 0$.

23. $\frac{\sqrt{-x^2 - 6x - 5}}{|x^2 + x - 2| - |x^2 + 7x + 6|} \geqslant 0$.

24. $\frac{1}{4 - \sqrt{x^2 - 2x - 8}} \leqslant \frac{1}{\sqrt{x^2 + 12}}$.

25. $\frac{\sqrt{2x^3 - 22x^2 + 60x}}{x - 6} \geqslant 2x - 10$.

26. $\sqrt{\frac{x^2 + 30x - 675}{x - 3}} > 15 - |x|$.