

## **Methodology for composing and solving test tasks in mathematics**

1. Fundamental principles for constructing testing theory.
2. Main directions of modernization of education.
3. Ways to implement the modernization of education.
4. Basic functions of assessment.
5. Basic control methods.
6. Types of knowledge control.
7. Stages of knowledge control.
8. Advantages of test control.
9. Features of testing tasks.
10. Main directions of modernization of the assessment system.
11. Basic requirements for knowledge assessment.
12. Features of right-hemisphere students.
13. Features of left-hemisphere students.
14. Test task and its essence.
15. Forms of test tasks.
16. Testing goals.
17. Tasks of the bank of test tasks.
18. Open type test tasks.
19. Closed-type test tasks.
20. Recognition tests.
21. Test tasks with various purposes.
22. Rules for compiling tests.
23. Structure of the test task.
24. Requirements for the content of test tasks.
25. Empirical requirements for the quality of test tasks.
26. Norm-referenced tests.
27. Criterion-oriented tests.
28. The role and significance of non-verbal materials in testing.
29. Requirements for the preparation and execution of tests.
30. Reliability of the test and the problem of guessing the correct answer.
31. Techniques for using test technology in mathematics lessons.
32. Structure of an open type test task.
33. Structure of a closed-type test task.
34. Individual characteristics of students and test control.
35. The concept of a pedagogical test and its essence.
36. Principles of testing.
37. Approaches to test development.
38. Knowledge assessment tasks.
39. Factors influencing the reliability of a test task.
40. Types of materials used in testing.
41. Main features of test control.
42. Main indicators to be assessed for knowledge.
43. Techniques for using test technology in mathematics lessons.
44. The essence of a norm-oriented test.
45. The essence of a criterion-oriented test.
46. Advantages of graphics tests.
47. The role of graphic tests in teaching mathematics.
48. The origin of testology.
49. Basic methods of test control.
50. Types of tests.

51. Basic requirements for the content of the test.
52. Sequence of actions when developing a test.
53. Priority tasks contributing to the development of the education system.
54. Main directions of modernization of general education.
55. The essence of a competent approach in the education system.
56. The essence of the active approach in the education system.
57. Quality of education.
58. The role of motivation during testing.
59. Mathematics education in the system of continuous education.
60. The essence of an individual approach to teaching mathematics.
61. Types of motivation for educational activities.
62. Taking into account cognitive styles in the testing process.
63. Testing technology.
64. Qualitative levels of problem-based learning.
65. Cognitive interest and its role in the student's educational activities.
66. Basic functions of knowledge diagnostics.
67. Types and forms of assessment.