TOPIC 5. Limit of a function Continuity of a function. Differential calculus of functions of one variable. Analysis of economic indicator interrelationships

ТЕМА 5. Границі функцій та неперервність. Диференціальне числення функцій однієї змінної. Аналіз взаємозв'язків зовнішньоекономічних показників

1. Numerical sets and operations with them.
2. The neighborhood of a point.
3. The definition of the function of one variable.
4. The domain of the definition and the range of values of a function.
5. Properties of a function.
6. The notion of the inverse function.
7. A superposition of functions.
8. A numerical sequence.
9. The definition of the limit of a sequence.
10. Infinitesimals and infinitely large values.
11. The definition of the limit of a function.
12. One-sided limits.
13. The first remarkable limit.
14. The second remarkable limit.
15. The definition of the function continuity at a point.
16. Classification of breaks.
17. The definition of a derivative.
18. A table of derivatives.
19. Rules of calculation of derivatives.
20. Derivatives of higher orders.
21. The definition of a differential.
22. Differentials of the higher orders.
23. The main theorems of differential calculus
24. L'Hospital rule.
25. The condition of the monotony of a function.
26. The maximum and the minimum of a function.
27. Convexity and concavity of the graph of a function.
28. Inflection points.
29. Asymptotes of the graph of a function.
30. Marginal analisys.

31. Elasticity of economic indicators.
32. The economic meaning of Fermat theorem.