

2D Graphics.

The objectives of the task: Strengthen the skills of construction 2d graphs.

Task Requirements: Plot the function $f(x)$.

Instructions for performing:

You can use commands **plot2d** or **plot2d2**.

You need to create a script file with the function $f(x)$ and to obtain a graph, then you need to do a scan the graph and send me the script file and the scan of graph.

Variants of tasks.

$$1. f(x) = \frac{1.2x^3 + x^2 - 2.8x - 1}{x^2 - 1}.$$

$$2. f(x) = \frac{1.9x^3 - 2.8x^2 - 1.9x + 1}{3x^2 - 1}.$$

$$3. f(x) = \frac{2x^2 - 5}{\sqrt{x^2 - 2}}.$$

$$4. f(x) = \frac{4.1x^3 - 3.25x}{4x^4 - 1}.$$

$$5. f(x) = \frac{x^2 - 11.5}{4x - 3}.$$

$$6. f(x) = \frac{2.3x^2 - 7}{\sqrt{3x^2 - 4}}.$$

$$7. f(x) = \sqrt[3]{(x - 4.5)^2(x + 2)}.$$

$$8. f(x) = \sqrt[3]{x^2(x - 4.7)}.$$

$$9. f(x) = \sqrt[3]{(x + 5)^2} - \sqrt[3]{(x - 7)^2}.$$

$$10. f(x) = \sqrt[3]{(x^2 - x - 2)^2}.$$

$$11. f(x) = \sqrt[3]{x^2(x + 3.5)^2}.$$

$$12. f(x) = \sqrt[3]{(x + 5)^2} - \sqrt[3]{x - 1}.$$

$$13. f(x) = \sqrt[3]{(3.5 + x)(x^2 + 6x + 6)}.$$

$$14. f(x) = \sqrt[3]{(4 + x)(x^2 + 2x + 1)}.$$

$$15. f(x) = \sqrt[3]{(x^2 - x - 6)^2}.$$

Evaluation criteria:

Plotting without errors - 2 points.

Available Comments - 0.5 points.

The presence of axis and graph labels - 0.5 points.

Maximum evaluation are **3 points**