VYPa: **Code Metrics in Object-oriented Programming**

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Code metrics in object-oriented programming are quantitative measures used to evaluate the various dimensions of source code developed according to OOP principles. These measures provide information about the quality, complexity, and maintainability of the code.

For example, the number of methods per class serves as an indicator of the complexity of the class. At the same time, the depth of inheritance measures the levels within the class hierarchy, providing indications of potential difficulties in understanding the code. The coupling between classes measures the interdependence between the different classes, with weaker coupling meaning more modular code that is easier to maintain. Method cohesion evaluates the relationships between methods within a class, contributing to a clearer design. Cyclomatic complexity is another key measure that assesses the program complexity by examining potential execution paths.

Constant monitoring of these measures helps developers identify problems, refine code structure, and ensure the development of resilient, maintainable, object-oriented code. These metrics are integral to making informed decisions that promote code quality and the long-term viability of software development projects.