

Command terms for Mathematics

Command terms with definitions

Students should be familiar with the following key terms and phrases used in examination questions, which are to be understood as described below. Although these terms will be used frequently in examination questions, other terms may be used to direct students to present an argument in a specific way.

Calculate = Obtain a numerical answer showing the relevant stages in the working.

Comment = Give a judgment based on a given statement or result of a calculation.

Compare = Give an account of similarities between two (or more) items or situations, referring to both (all) of them throughout.

Compare and contrast = Give an account of the similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.

Construct = Display information in a diagrammatic or logical form.

Contrast = Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.

Deduce = Reach a conclusion from the information given.

Demonstrate = Make clear by reasoning or evidence, illustrating with examples or practical application.

Describe = Give a detailed account.

Determine = Obtain the only possible answer.

Differentiate = Obtain the derivative of a function.

Distinguish = Make clear the differences between two or more concepts or items.

Draw = Represent by means of a labelled, accurate diagram or graph, using a pencil. A ruler (straight edge) should be used for straight lines. Diagrams should be drawn to scale. Graphs should have points correctly plotted (if appropriate) and joined in a straight line or smooth curve.

Estimate = Obtain an approximate value.

Explain = Give a detailed account, including reasons or causes.

Find = Obtain an answer, showing relevant stages in the working.

Hence = Use the preceding work to obtain the required result.

Hence or otherwise = It is suggested that the preceding work is used, but other methods could also receive credit.

Identify = Provide an answer from a number of possibilities.

Integrate = Obtain the integral of a function.

Interpret = Use knowledge and understanding to recognize trends and draw conclusions from given information.

Investigate = Observe, study, or make a detailed and systematic examination, in order to establish facts and reach new conclusions.

Justify = Give valid reasons or evidence to support an answer or conclusion.

Label = Add labels to a diagram.

List = Give a sequence of brief answers with no explanation.

Plot = Mark the position of points on a diagram.

Predict = Give an expected result.

Show = Give the steps in a calculation or derivation.

Show that = Obtain the required result (possibly using information given) without the formality of proof. “Show that” questions do not generally require the use of a calculator.

Sketch = Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.

Solve = Obtain the answer(s) using algebraic and/or numerical and/or graphical methods.

State = Give a specific name, value or other brief answer without explanation or calculation.

Suggest = Propose a solution, hypothesis or other possible answer.

Verify = Provide evidence that validates the result.

Write down = Obtain the answer(s), usually by extracting information. Little or no calculation is required. Working does not need to be shown.