

Action VERBS: Junior Cycle Mathematics

Definitions and Related Learning Outcomes

Analyse - study or examine something in detail, break down to bring out the essential elements or structure; identify parts and relationships, and to interpret information to reach conclusions

N4 U4

Apply - select and use knowledge and/or skills to solve a problem in a new situation

N1 GT1 AF3 AF6 U2
U8

Calculate - work out a numerical answer

N1 GT1 SP3

Classify - group things based on common characteristics

SP3

Compare - give an account of the similarities and (or) differences between two (or more) items or situations, referring to both (all) of them throughout

U4

Construct - use properties of shapes and geometric results to draw accurately, using only the prescribed geometrical tools

GT3

Convert - change from one form to another

N1 N2 AF1 AF3

Define - [a set]: give a rule that identifies the elements of a set

N5

Discuss - offer a considered, balanced review that includes a range of arguments, factors or hypotheses; opinions or conclusions should be presented clearly and supported by appropriate evidence

GT5 SP3

Estimate - state or calculate a rough value for a particular quantity

SP2

Evaluate - judge the relative quality or validity of something, which may include analysing, comparing and contrasting, criticising, defending or judging

GT3 GT4 SP3 U10 U12

Explain - give a reasoned account, showing how causes lead to outcomes

GT3 U13

Generalise - generate a general statement based on specific instances

N1 AF1

Generate - produce or create

AF1 AF2 AF3 AF5 SP1
SP3 U11 U12

Interpret - use knowledge and understanding to explain the meaning of something in context

N1 GT1 GT2 GT5 AF2
AF7 SP3 U4 U9 U13

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

N1 N2 N3 N5 GT2
GT3 GT5 GT6 AF1 AF2
AF7 SP1 SP2

Justify - give valid reasons or evidence to support an answer or conclusion

U13

Mathematise - generate a mathematical representation (e.g. graph, equation, geometric figure) to describe a particular aspect of a phenomenon

U7

Prove - give a deductive argument to demonstrate that a particular statement is true, including reasons for each step in the argument

Round - give the number in the required form (for example, a multiple of 100, or a number with three significant figures) that is closest in absolute terms to a particular number

Sketch - draw a rough diagram or graph without using geometrical tools

Solve - work out an answer or solution to

N2 N3 SP1 U8

State - provide a concise statement with little or no supporting argument

Understand - have detailed knowledge of, be able to use appropriately, and see the connections between parts

N1 N2 N5

Use - Apply knowledge or rules to put theory into practice

N1 N2 N3 N5 GT3
GT4 AF2 AF3 AF4 AF7
SP1 SP2 U13

Verify - demonstrate that a statement is true

N: Number

GT: Geometry and Trigonometry

AF: Algebra and Functions

ST: Statistics and Probability

U: Unifying Strand

Adapted from the Junior Cycle Mathematics Curriculum Specification available at www.curriculumonline.ie

More Mathematics resources available at www.jct.ie/maths