

National Numeracy Tests – Year 9 topics list

- Use powers and understand the importance of powers of 10
- Show awareness of the need for standard form and its representation on a calculator
- Equivalence of fractions, decimals and percentages
- Use and interpret different representations of fractions, e.g. mixed numbers and improper fractions
- Express one quantity as a percentage of another
- Calculate a percentage increase or decrease
- Use ratio and proportion to calculate quantities
- Add and subtract numbers to any number of decimal places
- Multiply and divide whole numbers and decimals
- Use the order of operations including brackets and powers
- Make and justify estimates and approximations of calculations
- Choose the appropriate degree of accuracy to present answers
- Calculate using foreign money and exchange rates
- Understand the risks involved in different ways of saving and investing
- Describe why insurance is important and understand the impact of not being insured
- Find circumferences of circles
- Make links between speed, distance and time
- Convert temperatures between appropriate temperature scales
- Find areas of circles
- Apply understanding of bearings and scale to interpret maps and plans, and to create plans and drawings to scale
- Test hypotheses, making decisions about how best to record and analyse the information from large data sets
- Construct and interpret graphs and diagrams (including pie charts) to represent discrete or continuous data, with the learner choosing an appropriate scale
- Select and justify statistics most appropriate to the problem considering extreme values (outliers)
- Examine results critically, select and justify choice of statistics recognising the limitations of any assumptions and their effect on the conclusions drawn
- Use appropriate mathematical instruments and methods to construct accurate drawings

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