

Section 1: Methods of proof

Crucial points

- 1. If you are not sure where to start, try anything!**
Draw a diagram if appropriate, or try to state the problem algebraically. Don't worry if you try some approaches which don't seem to work – even the wrong approach often helps you to get a better feel for the problem.
- 2. Make sure that each step of your proof is always true**
For example, if you are dividing through by an algebraic quantity, could that quantity ever be zero? If so, it invalidates this step of the proof unless you specifically exclude that possibility.
- 3. Be careful with your algebra**
When you are writing your proof you must take extra care to ensure that the algebra is correct.