# This file is purely a demonstration of how I structured my Advice and Extra Content files. You won’t learn much from this and don’t bother trying. Everyone makes different mistakes when practising past papers. You should practise past papers yourself and try to come up with a similar file yourself. It’s the process of making the file that’s important, not the file itself.

* **Often, a little planning can save a lot of time. Don't do unnecessary steps. Eg, if it asks you to find the length of the tangent from a point to the circle. Find the length, not where the tangent is.**
* Don't make assumptions; be explicit in what you're doing. Write answers as if someone watching you over your shoulder can follow what you’re doing without you needing to speak. This can be done by...
  + Setting quadratics, cubics, and quartics equal to zero.
  + Always being explicit in parts (e.g., writing m1 x m2 = - 1).
* Have a clear head when dealing with complicated algebra.
* List the restrictions on any variables at the start as you cannot count on yourself to remember them at the end (e.g., what the denominator/square root cannot equal or what the range of values is).
* Techniques such as similar triangles should be used far more often.
* You cannot cancel trigonometric functions from both sides unless you’re replacing them with another (e.g., tan). Thus, you need to factorise or something to avoid eliminating a solution.
* Always draw a sketch - especially for (coordinate) geometry - as it can help you realise what you gotta do.
* Don’t treat integration and differentiation separately. Don’t worry when you get asked for the integral of sin(x), think, “what do I differentiate to give sin(x)” and that is -cos(x) + c.
* Always remember the + and - when square rooting.

## Calculator-Specific

* Use the storage feature more often to prevent miswriting values.
* Write an equation using variables into the calculator then use the storage function to define variables later. This is useful for checking solutions to trigonometric equations.
  + Or use the ‘CALC’ button.
* You can use the minimum point to complete the square for you.