# 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.

# Advice

## Pure

* Consider the range of validity whenever doing any approximation, it may be useful.
* You can use the change of sign to show something like one function takes over another.
* Remember you consider the second derivative on either side to show it’s a point of inflexion.
* Be careful with the negative parts of the total shaded area.
* Check the answer careful (eg, 2 POSITIVE DISTINCT ROOTS so ensure the question matches up with your diagram).

## Mechanics

* Consider directions very carefully. Draw arrows if it helps you decide what to take as the positive direction.
* Remember that the point of tilting is an idea you may have to use.

## Statistics

* You may have to use a probability from the normal distribution in a binomial distribution.
* Remember to give the conclusion to a hypothesis test in context.
* Be very careful with the headings of the table for PMMC, you look at 1-tail, look across then look down or look at 2-tail across then down.
* Use complements more often to speed things up.
* Type I Errors may well come up here too.

# Extra Content

## Pure

* logba = 1 / logab
* You can calculate the derivative on either side to show it’s a maxima rather than working out a complicated second derivative.

## Mechanics

* The significance of a string being inextensible in pulleys is that the tension is constant throughout the string.

## Statistics

* For correlation hypothesis, you should write:
  + H0: p = 0, no correlation.
  + H1: p > or < 0.
* Explicitly write what to accept or reject.
* Use the databook for PMCC values.
* PMCC is represented by ρ (rho).
* Values are rounded to the nearest whole number so are actually non-zero (1) and are available to a larger number of dp.
* You can calculate the values 3 standard deviations below and if it is less than zero then it may not be an appropriate model
* Ranges are continuous, remember this when using midpoints.
* When using data to estimate (e.g., when it states ‘not included in the 500 patients’). **DO NOT** minus one from the denominator of each fraction each time as it’s sample data.
* If you’re using probabilities for hypothesis tests, use p and define p as being the probability of [insert context here].