Things that people find hard in 3U

* Circle geometry (because it’s often difficult to see and not very algorithmic)
  + A list of the theorems (because you can never have too many of them) **with proofs** (because they help a bit)
* Trigonometric proofs (because it’s not very algorithmic)
  + Certain tips and tricks (like converting things into sine and cosine, factorising, combining fractions, starting with one side and turning it into the other)
* Permutations and combinations (can be conceptually tricky and questions often get quite hard)
* Locus, the parabola and parametrics (the locus is one of the worst explained concepts in all of high school maths; is a bit abstract; proofs are a bit heavy sometimes; harder questions occasionally rely on obscure geometric facts that most students don’t remember)
  + Proofs
  + Example questions

Things that people find hard in 4U

* Everything (that’s a joke)
* Graphical interpretation of complex numbers (because vectors are not in the course anywhere and this is basically just vectors in two dimensions)
* Conics, especially proofs (can be algebraically challenging)
* Mechanics (similarly)
* Harder 3 unit, especially things like circle geometry and combinatorics