This is the fifth video in our problem-solving and modelling task for Unit 4 in the topic of functions, algebra and calculus for Mathematical Methods. We're looking at assessment.

Now, there are ways that you can use assessment and rubrics. The idea is remember that we don't write any of this on the paper. We have a separate rubric and we look at the Outcome 1, Outcome 2, Outcome 3 proportions that VCAA has given us. And for this one, Outcome 1 we allow eight marks, Outcome 2 we allow 10 marks, Outcome 3 we allow seven marks, making up the 25 marks that this SAC is worth.

And I've gone through the Part 1 and Part 2, and Part 3 of the SACs that we've just been presented in the previous videos, and did you notice that Outcome 2 Part 3 has got quite a heavy load? I've put five marks there because that's what Part 3 was quite difficult, it could have been explored in many different ways. And Outcome 2 is where I generalise, explore and extend.

So I've put five marks there to identify the difficulty of Part 3. But Part 3 also has some Outcome 1 tasks. So in other words, two marks where we can just do routine algebra. And Part 3 also has one mark for Outcome 3 because the students will use their calculator. But the main emphasis in Part 3 will be Outcome 2.

We've been given by VCAA for each of the outcomes Criterion 1, 2 and 3. So at Criterion 1, we're looking at mathematical conventions in graphs. Criterion 2, we're looking at mathematical expressions involving asymptotes, symmetry, derivatives, max and min. And Criterion 3, we're looking at routines and procedures of algebra, functions and calculus.

So Outcome 1 we often call skills. Outcome 2 is where we're going to extend and generalise and dig deeper into the context. Criterion 1, we choose suitable values and constraints related to the aspects that we've already been given. Criterion 2, we can use specific number and general cases, and that's where we actually get a bit deeper into the context, and then Criterion 3, we analyse and interpret the results. Compare the graph, say, and look at what's the difference.

Outcome 3 is our technology. So the idea is that we've got two marks there applied to appropriate selection and effective use of technology. And the students quickly use their technology to actually look at how to analyse these functions. In other words, have they got an elegant use of their technology? Do they know when to pick it up and put it down according to what the question says? Are they quick with their calculator? Have they been able to sketch a graph quickly without having to move the viewing window too fast? Okay, the application is how do we interpret it between graphical and symbolic forms? And we look at corresponding features of the functions and equations.

Sample assessment record is on the VCAA website. This is a good start for you to use your own rubric. You can use this one if it relates to how you've written your task, or you can write one using this as a starter point for you. The set of sample tasks is provided in the Advice for teachers, and the task in this video has been included in this set and will be produced in this video form as well as written form. Thank you.

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