Review Suggestions for Assessment 10 for SL2 Math

We have reviewed and introduced a number of KEY calculus concepts in our couple of months of Math SL2. These are: (1) quotient rule, (2) analyzing a function using calculus and using either the first or second derivative to verify types of extrema/IP, (3) optimization, (4) antiderivatives and integrals, (5) finding area under the curve OR between two curves, both with and without the calculator, (6) calculus and motion (displacement, velocity, acceleration), (7) our continued work with Probability Distributions, most recently the Normal Distribution and finally (8) revisiting the ideas of Vectors. Of course, in order to effectively apply "the calculus", you need to know your functions ⇒ so I would recommend knowing the exponential, the natural log and of course the sinusoidal functions.

PART 1 - Differential Calculus
Oxford 7.3 - for Quotient Rule, p212 - 215 (Exercise 7I & 7J) present examples of Product Rule (so try the Qs in Example 9 & 10 **without looking** at their solutions)

Oxford 7.5 - for Motion, p224 - 229 (Exercises 7O, 7P) present examples of Chain Rule as well as Product Rule (so try the Qs in Example 18, 19, 20 **without looking** at their solutions)

Oxford 7.6 - for Curve Analysis, p230 - 240 (Exercises 7Q, 7R, 7S, 7T, 7V and 7W) present examples of "curve analysis" (so try the Qs in Example 21 - 25 **without looking** at solutions)

Oxford 7.7 - for Optimization, p244 - 240 (Exercises 7X and 7Y) present examples of optimization problems (so try the Qs in Example 29 - 32 **without looking** at their solutions)

So Oxford, Chap 7 Review would be an EXCELLENT idea to work through on p248-250

PART 2 - Integral Calculus
Oxford 9.2 - on Integration & Antiderivatives, p297 - 300 (Exercises 9D, 9E) present more examples of indefinite integrals (so try the Qs in Example 4,5,6,7 **without looking** at their solutions)

Oxford 9.4 - Areas, p309 - 313 (Exercises 9I, 9J) present examples of evaluating definite integrals (so try the Qs in Example 11,12 **without looking** at their solutions)

Oxford 9.5 - Areas between curves, p313 - 317 (Exercises 9K, 9L) present examples of evaluating definite integrals (so try the Qs in Example 13, 14 **without looking** at their solutions)

So Oxford, Chapter 9 Review would be an EXCELLENT idea to work through on p327-8

PART 3 - Probability Distributions
Oxford 15.3 - on Normal Distribution, p538 - 544 (Exercises 15H, 15I, 15J) present more examples of the Normal Distribution (so try the Qs in Example 10,11,12 **without looking** at their solutions)

PART 4 - Vectors
Oxford 12 - on Vectors, the Review Exercises start on p438 - 441 …. But NO word problems about vectors on this assessment.