Review Suggestions for Assessment 11 for SL2 Math

We have reviewed and introduced a number of KEY calculus concepts in our last couple of months of Math SL2. These are: (1) calculus and motion (displacement, velocity, acceleration), (2) analyzing a function using calculus and using either the first or second derivative to verify types of extrema/IP, (3) optimization, (4) volumes of revolution, (5,6) our continued work with Probability Distributions, most recently the Normal Distribution and finally (7) 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.

1. **Motion**; Oxford Chap 9.7; Exercises 9O, p324, any from Q1-6 and then from Oxford Chap 14H, p512, and from Q1-6

2. Use calculus to **analyze functions**; Oxford 7V, p242, any from Q1-6 and Oxford 14D, p503, any from Q1,2,5

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

4. **Volumes of Revolution**; Oxford 9M, p319, any from Q1-5 and Oxford 9N, p320, any from Q1-6

5. **Normal Distribution**, Oxford Chap 15.3, exercise 15J, p543, any from Q1-5; exercise 15L, p548, any from Q3-5; exercise 15M, p550, any from Q5-8.

6. **Probability Distributions**, Oxford Chap 15 Review Questions starting on p551; do some of the CI Qs from Q1-7 and do some of the CA Qs from Q1-6

7. **Vectors**, Oxford Chap 12 Review Questions starting on p438; do some of the CI Qs from Q1-7 and do some of the CA Qs from Q1-5