**MATHEMATICS - GRADE 10 2022**

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| **TOPIC** | **ASSESSMENT STANDARDS** | **PORTFOLIO ASSESSMENT TASKS** |
| **PHASE 1 (19 January 2022 – 25 March 2022)** | | |
| **Algebra** | Products and factors | **Task 1:** Investigation:  Number patterns  21 – 25 Feb    **Task 2:** Control Test A:  Products & Factors  14 – 18 Feb  Control Test B:  Alg frac & Equations  7 – 11 March |
| Algebraic fractions |
| Equations, inequalities and simultaneous equations |
| Solve equations in two unknowns (both linear) |
| **Number patterns** | Linear number patterns |
| **Euclidean Geometry** | Revision of Grade 9 Geometry  Quadrilaterals |
| **PHASE 2 (5 April 2022 – 24 June 2022)** | | |
| **Analytical Geometry** | Distance, midpoint, gradient | **Task 3:** Assignment:  Euclidean Geometry  25 – 29 April  **Task 4:** June Exams  13 – 24 June  **Task 5:** Control Test A:  Analytical Geom  16 – 20 May  Control Test B:  Functions  23 – 27 May |
| **Functions** | Investigate characteristics of the straight line, parabola and hyperbola   and . |
| **Algebra** | Exponents and exponential equations |
| Placement of surds |
| **Functions** | Investigate characteristics of the exponential function |
| **PHASE 3 (19 July 2022 – 11 November 2022)** | | |
| **Euclidean Geometry** | Midpoint theorem and applications | **Task 6:** Control Test A: Midpt & Gen Trig  10 – 12 Aug  Control Test B: Trig func  15 – 19 Aug  **Task 7:** Control Test C: Finance  5 – 9 Sept  Control Test D: Probability  12 – 16 Sept  **Task 8:** October Exam  24 Oct – 11 Nov |
| **Trigonometry** | Definition of trigonometric ratios |
| Solution of problems in 2-dimensions |
| Functions : *y* = sin *kx* + *q* ; *y* = cos *kx* + *q* and  *y* = tan *kx* + *q* |
| **Financial Mathematics** | Simple and compound growth |
| **Probability** | Relative and theoretical probability |
| Venn diagrams and Tree diagrams to solve problems |
| **Statistics** | Measurements of central tendency and ranges |
| Interpretation of data |
| **Measurement** | Surface area and volume of solids |