**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 patterns21 – 25 Feb **Task 2:** Control Test A:Products & Factors14 – 18 FebControl 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 GeometryQuadrilaterals |
| **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 MayControl Test B:Functions23 – 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 Trig10 – 12 AugControl Test B: Trig func15 – 19 Aug**Task 7:** Control Test C: Finance5 – 9 SeptControl Test D: Probability12 – 16 Sept**Task 8:** October Exam24 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 |