**KASENGE GREENHILL SECONDARY SCHOOL**

**SCHEME OF WORK 2025**

**MATHEMATICS SENIOR THREE**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **PRD** | **TOPIC AND SUBTOPIC** | **LEARNING OUTCOME** | **COMPETENCY** | **METHODOLOGY** | **TEACHING AIDS** | **REFERENCES** | **REMARKS** |
| **1** | **2** | **REVIEW OF THE LAST TERMS WORK AND CORRECTIONS FOR EOT EXAMS** | | | | | | |
| **2** | **3** | EQUATION OF A STRAIGHT LINE | The learner should be able to understand the relationship between a linear equation and its graph |  | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **2** | **3** | EQUATION OF A STRAIGHT LINE  GRADIENT OF A LINE | The learner should be able to determine the gradient when given an equation |  | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **3** | **2** | EQUATION OF A STRAIGHT LINE  PARRALLEL AND PERPENDICULAR LINES | The learner identifies the relationship between parallel and perpendicular lines | Parallel lines have equal gradients  For perpendicular  M1\*M2= -1 | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **3** | **2** | **ACTIVITY OF INTEGRATION** | | | | | | |
| **4** | **3** | TRIGONOMETRY 1 | The learner should be able to derive sine, cosine and tangent functions from the unit circle | Sine = opp/hyp  Cos = adj/hyp  Tan = opp/adj | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **5** | **2** | TRIGONOMETRY 1 | The learner should be able to read and use calculators to find values of trig functions and angles of depression and elevation | Proper usage of the calculator | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **6** | **2** | ACTIVITY OF INTEGRATION | | | | | | |
| **6** | **3** | DATA COLLECTION AND DISPLAY | The learner should be able to understand mode, mean, median as measures of central tendency | The learner calculates measures of central tendency using various formulas | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **7** | **3** | DATA COLLECTION AND DISPLAY    DRAWING AND USING FREQUENCY TABLES | The learner should be able to draw frequency tables of ungrouped data | The learner draws frequency tables of ungrouped data and use them to find mean and median | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **7** | **3** | DATA COLLECTION AND DISPLAY  DRAWING HISTOGRAMS AND OGIVES | The learner should be able to draw histograms and ogives | The leaner ably draws the histogram and the cumulative frequency curve | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens  Graph books | Baroque math learners book 3  Teachers guide  internet |  |
| **8** | **1** | ACTIVITY OF INTEGRATION | | | | | | |
| **8** | **MID TERM ONE EXAMS** | | | | | | | |
| **9** | **2** | VECTORS | The learner should be able to describe position vectors geometrically and position vectors. | The learner finds the vector of s directed line segment when position vector of the end points are known | Guided discovery  Group discussions  Question and answer | Charts  Learners books  pens | Baroque math learners book 3  Teachers guide  internet |  |
| **9** | **3.** | VECTORS | The learner should be able to use vector method to show parallelism and collinearity | The learner ably uses vectors to show parallelism and collinearity | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens  Graph books | Baroque math learners book 3  Teachers guide  internet |  |
| **10** | **2** | Activity of integration | | | | | | |
| **10** | **3** | RATIOS AND PROPORTIONS | The learner should be able to apply equivalent ratios | The learner applies equivalent ratios | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens  Graph books | Baroque math learners book 3  Teachers guide  internet |  |
| **11** | **3** | RATIOS AND PROPORTIONS | The learner should be able to apply direct and inverse proportional reasoning | The learner understands and applies ratios and proportions | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens  Graph books | Baroque math learners book 3  Teachers guide  internet |  |
| **12** | **2** | **ACTIVITY OF INTEGRATION** | | | | | |  |
| **13** | **END OF TERM EXAMS** | | | | | | | |
| **TERM TWO**   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **WK** | **PRD** | | | **TOPIC AND SUBTOPIC** | **LEARNING OUTCOME** | **COMPETENCY** | **METHODOLOGY** | **TEACHING AIDS** | **REFERENCES** | **REMARKS** | | **1** | **2** | | | **REVIEW OF THE LAST TERMS WORK AND CORRECTIONS FOR EOT EXAMS** | | | | | | | | **2** | **2** | | | BUSINESS MATHEMATICS | The learner should be able to use a multiplier when calculating percentage change | the learner ably uses a multiplier when calculating percentage change | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **2** | **3** | | | BUSINESS MATHEMATICS | The learner should be able to calculate compound interest, depression, appreciation and hire purchase | The learner ably finds compound interest, depression, appreciation and hire purchase | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **3** | **3** | | | BUSINESS MATHEMATICS | The learner should be able to calculate taxable income and income tax | The learner ably finds taxable income and income tax | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **3** | **2** | | | **ACTIVITY OF INTEGRATION** | | | | | | | | **4** | **3** | | | TRIGONOMETRY 2 | The learner should be able to find trig ratios of angles of 90,45. 60 and 30 | The learner ably uses the Pythagoras theorem to find these ratios | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **4** | **3** | | | TRIGONOMETRY 2 | The learner should be able to use the cosine and sine rule and apply in real life situations | Use of graphs to derive the cosine and sine rule | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **5** | **2** | | | **ACTIVITY OF INTEGRATION** | | | | | | | | **6** | | | **3** | **MATRICES** | The learner should be able to define a matrix and state its order | Order depends on the rows and columns | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **6** | | | **3** | **MATRICES** | The learner should be able to find the Determinant and inverse of a 2x2 matrix | The learner ably finds the Determinant and inverse of a 2x2 matrix | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **7** | | | **2** | **ACTIVITY OF INTEGRATION** | | | | | | | | **7** | | | **3** | **MATRIX TRANSFORMATIONS** | The learner should be able to identify transformations for reflections, enlargement and rotations | The learner uses graphical method to determine the images of objects | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **8** | | | **MID TERM TWO EXAMS** | | | | | | | | | **9** | | | **3** | **MATRIX TRANSFORMATIONS** | The learner should be able to identify the relationship between area scale factor and determinant of a transformation matrix | The area of an image can be obtained as a product of area of the object and determinant of a transformation matrix | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **9** | | | **2** | **MATRIX TRANSFORMATIONS** | The learner should be able to find a single matrix for successive transformations | **M = M2\*M1** | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **10** | | | **2** | **ACTIVITY OF INTEGRATION** | | | | | | | | **11** | | | **3** | **SIMULTANEOUS EQUATIONS** | The learner should be able to solve simultaneous equations in one unknown | Equations are solved by elimination and substitution | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **12** | | **END OF TERM TWO EXAMS** | | | | | | | | |   **TERM THREE**   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **WK** | **PRD** | **TOPIC AND SUBTOPIC** | **LEARNING OUTCOME** | **COMPETENCY** | **METHODOLOGY** | **TEACHING AIDS** | **REFERENCES** | **REMARKS** | | **1** | **2** | **REVIEW OF THE LAST TERMS WORK AND CORRECTIONS FOR EOT EXAMS** | | | | | | | | **2** | **3** | **PROBABILITY** | The learner must be able to understand the elementary concepts of probability | Probability refers to the expected outcomes to the sample space | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **3** | **3** | **PROBABILITY** | The learner must be able to determine probabilities from experiments and real life data | This involves differentiating between theoretical and experimental probabilities | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **4** | **3** | **PROBABILITY** | The learner should be able to use probability tree diagrams to determine probabilities independent events | This involves using Venn diagrams to find probabilities | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **5** | **3** | **ACTIVITY OF INTEGRATION** | | | | | | | | **6** | **MID TERM THREE EXAMS** | | | | | | | | | **7** | **3** | **QUADRATIC EQUATIONS** | The learner should be able to determine roots of a quadratic equation | These can be got by factorization, completing squares and using the formula | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **8** | **3** | **QUADRATIC EQUATIONS** | The learner should be able to draw a graph for a quadratic graph | The learner ably draws a graph for a quadratic graph | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **9** | **3** | **ACTIVITY OF INTEGRATION** | | | | | | | | **10** | **3** | **CIRCLE PROPERTIES** | The learner should be able to identify the arc, chord, sector and segment | Elementary parts of a circle | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **11** | **2** | **CIRCLE PROPERTIES** | The learner should be able to find angle properties of cyclic quadrilaterals | **A**ngle properties of **a**  cyclic quadrilateral | Guided discovery  Group discussions  Question and answer | Charts  Learners books  Pens | Baroque math learners book 3  Teachers guide  internet |  | | **12** | **END OF YEAR EXAMS** | | | | | | | |   **MADE BY : TR GALIWANGO WASSWA HUSSEIN NEWTON**  **SIGN OF HOD: …………………………………………………………….** | | | | | | | | |

**TERM ONE**