## REVISION:

Grade 12 Mathematics
www.refractions.co.za

## PAPER 1

## @lgebra

| R1001 | Factorization |  |
| :---: | :---: | :---: |
| R1002 | Equations |  |
| R1003 | Algebraic Fractions |  |
| R2001 | Exponents |  |
| R2002 | Surds |  |
| R2003 | Completing the Square |  |
| R2004 | Equations |  |
| R2005 | Inequalities |  |
| R2006 | Nature of Roots |  |
| R3001 | Logarithms |  |
| R3002 | Cubic Polynomials |  |
| R3003 | Rem. and Factor Theorem |  |
|  |  |  |
| Work through Past Paper questions on this topic |  |  |


(E) unctions

| R2201 | Introduction and Properties |  |
| :---: | :---: | :---: |
| R2202 | Finding the Equation |  |
| R2203 | Finding Intercepts |  |
| R2204 | Asymptotes |  |
| R2205 | Turning Point |  |
| R2206 | Sketching Graphs |  |
| R2207 | Domain and Range |  |
| R2208 | Axis of Symmetry |  |
| R2209 | Continuity |  |
| R2210 | Increasing and Decreasing |  |
| R2211 | Average Gradient |  |
| R2212 | Reflection and Translation |  |
|  | Graphical Interpretation: |  |
| R2213 | GI: Length of Lines |  |
| R2214 | GI: Inequalities |  |
| R2215 | GI: Nature of Roots |  |
| R3201 | Horizontal and Vertical Line Test |  |
| R3202 | Inverses |  |
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© alculus

| R3401 | Limits |  |
| :---: | :---: | :---: |
| R3402 | Gradient |  |
| R3403 | Differentiation: 1st principle |  |
| R3404 | Differentiation: Rules |  |
| R3405 | Tangent to Curve |  |
| R3406 | Graphs: Properties |  |
| R3407 | Graphs: Sketching |  |
| R3408 | Graphs: Determine Equation |  |
| R3409 | Practical Application |  |
| R3410 | Optimization |  |
|  |  |  |
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(C)inance

| R1701 | Simple Interest |  |
| :---: | :---: | :---: |
| R1702 | Hire Purchase |  |
| R1703 | Compound Interest |  |
| R2701 | Simple Decay |  |
| R2702 | Compound Decay |  |
| R2703 | Compound Intervals |  |
| R2704 | Nom. and Eff. interest rates |  |
| R2705 | Time Lines |  |
| R3701 | Future Value Annuities |  |
| R3702 | Payments beginning of period |  |
| R3703 | Sinking Funds |  |
| R3704 | Present Value Annuities |  |
| R3705 | Balance on Loan |  |
| R3706 | Time Period |  |
| R3707 | Delayed payments |  |
|  |  |  |

## (())robability.

(Available 2024)

| R1901 | General overview on basics |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| R2901 | Dependent and Ind. events |  |  |  |  |
| R2902 | Venn Diagrams |  |  |  |  |
| R2903 | Tree Diagrams |  |  |  |  |
| R2904 | Contingency Tables |  |  |  |  |
| R3901 | Fund. Counting Principle |  |  |  |  |
|  |  |  |  |  |  |
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## Statistics

(Available 2024)

| R1801 | Central Tendency and Dispersion |  |
| :---: | :---: | :---: |
| R1802 | Tables and Diagrams |  |
| R2801 | Histograms and Frequency Polygons |  |
| R2802 | Ogives |  |
| R2803 | Variance and Standard Deviation |  |
| R2804 | Data Symmetry and Outliers |  |
| R3801 | Bivariate Data |  |
| R3802 | Least Squares Regression Line |  |
|  |  |  |
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