

GAUTENG PROVINCE
MATHEMATICS – ANNUAL TEACHING PLAN – GRADE 10
GRADE 10 ATP 2026 FINAL




GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

TERM 1 – 11 WEEKS (53 DAYS)

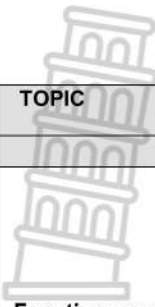
DATE	TOPIC	CONTENT	F	ASSESSMENT		% Completed
TERM 1			2 TASKS FOR TERM 1			
Week 1 14/1 – 16/1 (3 days)	Algebraic Expression	1. Understand that real numbers can be rational or irrational. (Revise Number System) 2. Establish between which two integers a given simple surd lies. 3. Round real numbers to an appropriate degree of accuracy.				3%
Week 2 19/1 – 23/1 (5 days)	Algebraic Expression	Revise multiplication of monomial by binomial ; binomial by binomial and squaring a binomial 4. Multiplication of a binomial by a trinomial. 5. Factorization to include types taught in Grade 9 and Revise <ul style="list-style-type: none"> • common factor • difference of squares • trinomials • grouping in pairs 	Formal Task	Investigation 25% SBA		6%
Week 3 26/1 – 30/1 (5 days)	Algebraic Expression	<ul style="list-style-type: none"> • sum and difference of two cubes 6. Simplifying, adding, and subtracting algebraic fractions using factorization with denominators of cubes (limited to sum and difference of cubes).				9%
Week 4 2/2 – 6/2 (5 days)	Exponents, Algebraic Expression	1. Revise laws of exponents learnt in Grade 9 were $x; y > 0; n, m \in \mathbb{Z}$ <ul style="list-style-type: none"> • $x^m \times x^n = x^{m+n}$ • $x^m \div x^n = x^{m-n}$ • $(x^m)^n = x^{mn}$ 				12%
Week 5 09/2 – 13/2 (5 days)	Exponents, equations, and inequalities	<ul style="list-style-type: none"> • $x^m \times y^m = (xy)^m$ Also, by definition: $x^{-n} = \frac{1}{x^n}$, $x \neq 0$ and $x^0 = 1$, $x \neq 0$ 2. Use the laws of exponents to simplify expressions and solve equations, accepting that the rules also hold for $m, n \in \mathbb{Q}$. 3.1 Revise the solution of linear equations.				15%


		3.2 Solve quadratic equations (by factorisation).				
Week 6 16/2 – 20/2 (5 days)	Exponents, equations, and inequalities	3.3 Solve simultaneous linear equations in two unknowns. 3.4 Solve word problems involving linear, quadratic, or simultaneous linear equations				18%
Week 7 23/2 – 27/2 (5 days)	Exponents, equations, and inequalities	3.5. Solve literal equations (changing the subject of a formula). 3.6. Solve linear inequalities (and show solution graphically). Interval notation must be known.				21%
Week 8 2/3 – 6/3 (5 days)	Trigonometry	Revise the Pythagoras Theorem 1. Define the trigonometric ratios $\sin\theta$, $\cos\theta$ and $\tan\theta$ Using the right – angled triangle. 2. Extend the definitions of $\sin\theta$; $\cos\theta$ and $\tan\theta$ for $0^\circ \leq \theta \leq 360^\circ$.				24%
Week 9 09/3 – 13/3 (5 days)	Trigonometry	3. Define the reciprocal of the trigonometric ratios $\operatorname{cosec}\theta$, $\sec\theta$ and $\cot\theta$, using the right – angled triangles (these three reciprocals should be examined in grade 10 only) 4. Use a diagram to determine the numerical values of ratios for angles from 0° to 360°				27%
Week 10 16/3 – 20/3 (4 days)	Trigonometry	5. Derive values of the trigonometric ratios for the special cases (without using a calculator $\theta \in \{0^\circ; 30^\circ; 45^\circ; 60^\circ; 90^\circ\}$ 6. Solve simple trigonometric equations for angles between 0° and 90°	Formal Task	Test 75% SBA		30%
Week 11 23/3 – 27/3 (5 days)	Number Patterns	7. Patterns: Investigate number patterns leading to those where there is a constant difference between consecutive terms, and the general term (without using a formula-see content overview) is therefore linear.				33%
END OF TERM 1 SCHOOLS CLOSES ON 27/03/2026						

DATE	TOPIC	CONTENT	F	ASSESSMENT	Date Completed	% Completed
TERM 2		2 TASKS FOR TERM 2				
Week 1 8/4 – 10/4 (3 days)	Euclidean Geometry	1. Revise basic results established in earlier grades regarding lines, angles and triangles, especially the similarity and congruence of triangles				36%
Week 2 13/4 – 17/4 (3 days)	Euclidean Geometry	2. Define the following special quadrilaterals: : Kite, parallelogram, rectangle, rhombus, square and trapezium. Investigate and make conjectures about the properties of the sides, angles, diagonals, and areas of these quadrilaterals. Prove these conjectures				39%
Week 3 20/4 – 24/4 (5 days)	Euclidean Geometry	<p>4. The following proofs are examinable</p> <ul style="list-style-type: none"> ● The opposite sides and angles of a parallelogram are equal. ● The diagonals of a parallelogram bisect each other. ● If one pair of opposite sides of a quadrilateral are equal and parallel the quadrilateral is a parallelogram. ● The diagonals of a rectangle are equal. ● The diagonals of a rhombus bisect each other at right angle and bisect the interior angles. <p>Solve problems and prove riders using the properties of parallel lines, triangles, and quadrilaterals.</p>				42%
Week 4 28/4 – 30/4 (5 days)	Euclidean Geometry	<p>5. Investigate line segment joining the midpoints of two sides of a triangle.</p> <p>The following theorem is examinable</p> <p>The line segment joining the midpoints of two sides of a triangle is parallel to the third side and equal to half the length of the third side</p> <p>Solve problems and prove riders using the properties of parallel lines, triangles, quadrilaterals, and midpoint theorem.</p>	Formal Task	ASSIGNMENT 25% SBA		45%
Week 5 4/5 – 8/5 (5 days)	Analytical Geometry	<p>Represent geometric figures on a Cartesian co-ordinate system.</p> <p>Derive and apply for any two points $(x_1; y_1)$ and $(x_2; y_2)$ the formulae for calculating the:</p> <p>1.Distance between the two points.</p>				48%

Week 6 11/5 – 15/5 (5 days)	Analytical Geometry 	2. Gradient of the line segment connecting the two points (and from that identify parallel and perpendicular lines); and 3. Coordinates of the Mid-point of the line segment joining the two points				51%
Week 7 18/5 – 22/5 (5 days)	Functions and Graphs	1. The concept of a function, where a certain quantity (output value) uniquely depends on another quantity (input value). Work with relationships between variables using tables, graphs, words, and formulae. Convert flexibly between these representations. Note : the graph defined by $y = x$ should be known from grade 9 2. Point by point plotting of basic graphs defined by $y = x$ 3. Investigate the effect of a and q in $y = ax + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).				55%
Week 8 25/5 – 29/5 (5 days)	Functions and Graphs	2. Point by point plotting of basic graphs defined by $f(x) = x^2$ 3. Investigate the effect of a and q in $f(x) = ax^2 + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).				57%
Week 9 1/6 – 5/6 (5 days)	Functions and Graphs	2. Point by point plotting of basic graphs defined by $f(x) = \frac{1}{x}$ 3. Investigate the effect of a and q in and $f(x) = \frac{a}{x} + q$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).				61%
Week 10 8/6 – 12/6 (5 days)	June Examination	June Examination		June Examination		
15 JUNE - SCHOOL HOLIDAY						
16 JUNE YOUTH DAY – SCHOOL HOLIDAY						
Week 11 17/6 – 19/6 (3 days)	June Examination	June Examination		June Examination		
Week 12 22/6 – 26/6 (5 days)	June Examination	June Examination		June Examination		
END OF TERM 2 SCHOOLS CLOSES ON 26/06/2026						

TERM 3 - 10 WEEKS (47 Days)

DATE	TOPIC	CONTENT	F	ASSESSMENT	Date Completed	% Completed
TERM 3			2 TASKS FOR TERM 3			
Week 1 21/7 – 24/7 (5 days)	 Functions and Graphs	2. Point by point plotting of basic graphs defined by $y = b^x$; $b > 0$ 3. Investigate the effect of a and q in $y = ab^x + q$; $b > 0, b \neq 1$ to discover shape, domain (input values), range (output values), asymptotes, axes of symmetry, turning points and intercepts on the axes (where applicable).				64%
Week 2 27/7 – 31/7 (4 days)	Trigonometric Functions	4. Point by point plotting of basic graphs defined by, $y = \sin \theta$, $y = \cos \theta$ and $y = \tan \theta$ for $\theta \in [0^\circ; 360^\circ]$ 5. Study the effect of a and q on the graphs defined by : $y = a \sin \theta + q$, where a and $q \in \mathbb{Q}$ and $\theta \in [0^\circ; 360^\circ]$ through point by point sketching <ul style="list-style-type: none"> discover shape, range, turning points, intercepts, amplitude, asymptotes, increasing decreasing (where applicable) 				67%
Week 3 3/8 – 7/8 (5 days)	Trigonometric Function	<ul style="list-style-type: none"> $y = a \cos \theta + q$ and $y = a \tan \theta + q$ where a and $q \in \mathbb{Q}$ and $\theta \in [0^\circ; 360^\circ]$ through point by point sketching <ul style="list-style-type: none"> discover shape, range, turning points, intercepts, amplitude, asymptotes, increasing decreasing (where applicable); 				69%
09 AUGUST –NATIONAL WOMEN'S DAY - 10 AUGUST PUBLIC HOLIDAY						
Week 4 11/8 – 14/8 (4 days)	Trigonometric Functions	6. Sketch graph determine the equations of given graphs and INTERPRET graphs. INTERPRET with focus on <ul style="list-style-type: none"> Determining the equation Intercepts with axis Amplitude Period Vertical and horizontal Lengths Point of intersection Inequalities 	Formal Task	TEST 50%		73%

		<ul style="list-style-type: none"> Reflection about x – axis and vertical translation <p>Note : Sketching of the graphs must be based on the observation of the effect of a and q (a, a vertical stretch and/or a reflection about the x-axis and q a vertical shift)</p>				
Week 5 17/8 - 21/8 (5 days)	Trigonometry (2D)	<ol style="list-style-type: none"> Solve two dimensional problems involving right angled – triangle Problems in two dimensional 				76%
Week 6 24/8 – 28/8 (5 days)	Statistics	<ol style="list-style-type: none"> Measures of central tendency in ungrouped data. Calculate the mean. Determine the median and the mode. Measures of central tendency in grouped data: calculation of mean estimate of grouped and ungrouped data and identification of modal interval and interval in which the median lies. Range as a measure of dispersion and extension to include percentiles, quartiles, inter-quartile, and semi-inter-quartile range. Five number summary(maximum , minimum and quartiles) and box and whisker diagram. 				79%
Week 7 31 /8– 4/9 (5 days)	Statistics	<ol style="list-style-type: none"> Use the statistical summaries (measures of central tendency and dispersion), and graphs to analyse and make meaningful comments on the context associated with the given data. Represent the data on bar graphs, line graphs and Histogram 				82%
Week 8 7/9 – 11/9 (5 days)	Probability	<ol style="list-style-type: none"> The use of probability models to compare the relative frequency of events with the theoretical probability. The use of Venn diagrams to solve probability problems, deriving and applying the following for any two events in a sample space S: $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$ 	Formal Task	TEST 50%		85%
Week 9 14/9 – 18 /9 (5 days)	Probability	<p>A and B are Mutually exclusive if $P(A \text{ and } B) = 0$;</p> <p>A and B are complementary if they are mutually exclusive; and $P(A) + P(B) = 1$.</p> <p>then $P(B) = P(\text{not}(A)) = 1 - P(A)$</p>				88%
Week 10 21/9 – 23/9 (3 days)	Finance and growth	<ol style="list-style-type: none"> Use the simple and compound growth formulae $A = P(1 + in)$ and $A = P(1 + i)^n$ to solve problems, including interest, hire purchase, 				91%

24 SEPTEMBER HERITAGE DAY

END OF TERM 3 SCHOOLS CLOSES ON 23/09/2026

TERM 4 - 10 WEEKS (47 DAYS)

DATE	TOPIC	CONTENT	Formal Task	ASSESSMENT	Date Completed	% Completed
TERM 4			1 TASK FOR TERM 4			
Week 1 6/10 – 9/10 (4 days)	Finance and growth	Use the simple and compound growth formulae $A = P(1 + in)$ and $A = P(1 + i)^n$ to solve problems, including interest, inflation, population growth and other real-life problems. Understand the implication of fluctuating foreign exchange rates (e.g. on the petrol price, imports, exports, overseas travel)				94%
Week 2 12/10 – 16/10 (5 days)	Measurement	1. Revise the volume and surface area of right-prisms and cylinders. 2. Study the effect on volume and surface area when multiplying any dimension by a constant factor k.				97%
Week 3 19/10 – 23/10 (5 days)	Measurement	3. Calculate the volume and surface area of spheres, right pyramids, right cones, and combination of those objects (figures).	Formal Task	TEST		100%
Week 4 26/10 – 29/10 (5 days)	Revision of Algebra	Revision of Algebra and Functions				
Week 5 2/11 – 6/11 (5 days)	Revision Trigonometry & Euclidean Geometry	Revision Trigonometry & Euclidean Geometry				
Week 6 9/11 – 13/11 (5 days)	FINAL EXAMINATIONS					
Week 7 16/11 – 20/11 (5 days)	FINAL EXAMINATIONS					
Week 8 23/11 – 27/11 (5 days)	FINAL EXAMINATIONS					
Week 9 30/11 – 4/12 (5 days)	FINAL EXAMINATIONS					
Week 10 7/12 – 11/12 (5 days)	REPORTING					
7/12 – 11/12 (5 days)						
END OF TERM 4 SCHOOLS CLOSES ...11/ 12 / 2026: END OF YEAR						

note:

- Modelling as a process should be included in all papers, thus contextual questions can be set on any topic.
- Questions will not necessarily be compartmentalised in sections, as this table indicates. Various topics can be integrated in the same question.

Mark distribution for Mathematics NCS end-of-year papers: Grades 10-12

Paper 1: Grades 12: bookwork: maximum 6 marks

description	Grade 10	Grade 11	Grade. 12
Algebra and equations (and inequalities)	30 ± 3	45 ± 3	25 ± 3
Patterns and sequences	15 ± 3	25 ± 3	25 ± 3
Finance and growth	10 ± 3		
Finance, growth and decay		15 ± 3	15 ± 3
Functions and graphs	30 ± 3	45 ± 3	35 ± 3
Differential Calculus			35 ± 3
Probability	15 ± 3	20 ± 3	15 ± 3
Total	100	150	150

Paper 2: Grades 11 and 12: theorems and/or trigonometric proofs: maximum 12 marks

description	Grade 10	Grade 11	Grade 12
Statistics	15 ± 3	20 ± 3	20 ± 3
Analytical Geometry	15 ± 3	30 ± 3	40 ± 3
Trigonometry	40 ± 3	50 ± 3	50 ± 3
Euclidean Geometry and Measurement	30 ± 3	50 ± 3	40 ± 3
Total	100	150	150

NB: 7 SBA TASKS TO BE COMPLETED IN 2025 YEAR END.

MATHEMATICS GRADE 10							
Task Number (SBA)	7 (Seven)						
Term	Term 1		Term 2		Term 3		Term 4
Task Name	Project/ Investigation	Test	Assignment	June Exam	Test	Test	Test
Mark allocation indicate if fixed or suggested	Suggested Minimum Marks 50	Suggested Minimum Marks 50	Suggested Minimum Marks 50	Suggested Minimum Marks 150	Suggested Minimum Marks 50	Suggested Minimum Marks 50	Suggested Minimum Marks 50
Weighting	15%	14%	15%	14%	14%	14%	14%
Term Reporting Weightings	25%	75%	25%	75%	50%	50%	SBA= 40% Exam= 60%