

School Report

Customer name	SAMPLE HS.	
Test number and paper	TI2014T1G12M1	Grade 12 - Mathematics paper 1
Test date	2014-04-29	

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Overall Summary

The purpose of this report is to provide an analysis of the results for the test by classes / group

Key to colour coding:

Pink	Indicates classes where the average score is between 0% and 39% for the test (this is either "not achieved" or "elementary achievement" according to the 7-point rating scale).
Yellow	Indicates classes where the average score is between 40% and 49% for the test (this is a "moderate achievement" according to the 7-point rating scale).
Blue	Indicates classes where the average score is over 50% for the test.

SAMPLE HS.		
2014-04-29		
Performance by class	Learners	Score
Mr Smith	7	43.0%
Mrs Green	7	35.4%
Average Performance	14	39.2%

Individual Learner Performance

This report shows the scores of the individual learners. The learners are ranked by score from highest to lowest.

Key to colour coding:

Pink	Indicates individual learner scores between 0% and 39% for the test (this is either "not achieved" or "elementary achievement" according to the 7-point rating scale).
Yellow	Indicates individual learner scores between 40% and 49% for the test (this is a "moderate achievement" according to the 7-point rating scale).
Blue	Indicates individual learner scores of 50% and above for the test.

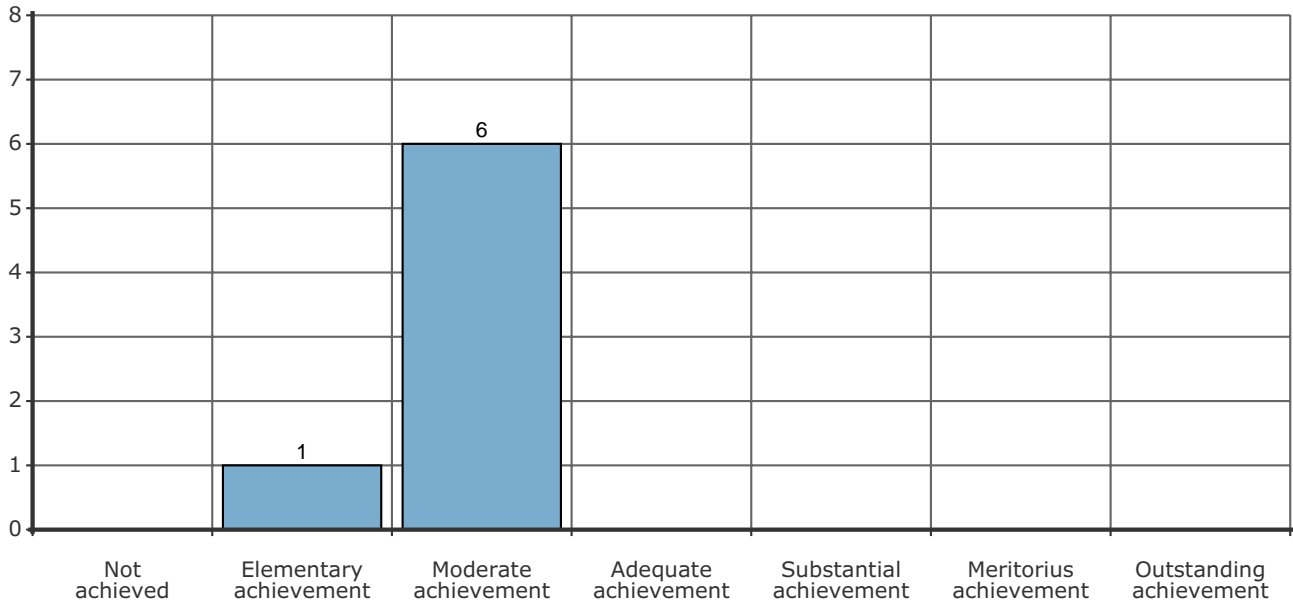
SAMPLE HS. Mr Smith		
2014-04-29		
Rank	Learner	Score
1	Calvin Klein	48.0%
2	Caleb Smith	45.3%
3	Ntoni Thandile	45.3%
4	Bianca Taylor	44.0%
5	Emma Marks	42.7%
6	Qhwesha Aneka	40.0%
7	Litha Lwandlekazi	36.0%
Average Score		43%

SAMPLE HS. Mrs Green		
2014-04-29		
Rank	Learner	Score
1	Gwavu Unathi	61.3%
2	Thuliswa Thekiso	44.0%
3	James Hood	42.7%
4	Linda Smith	40.0%
5	Marno Louw	32.0%
6	Ngobo Lonwabo	28.0%
7	Jared Lightbody	0.0%
Average Score		35.4%

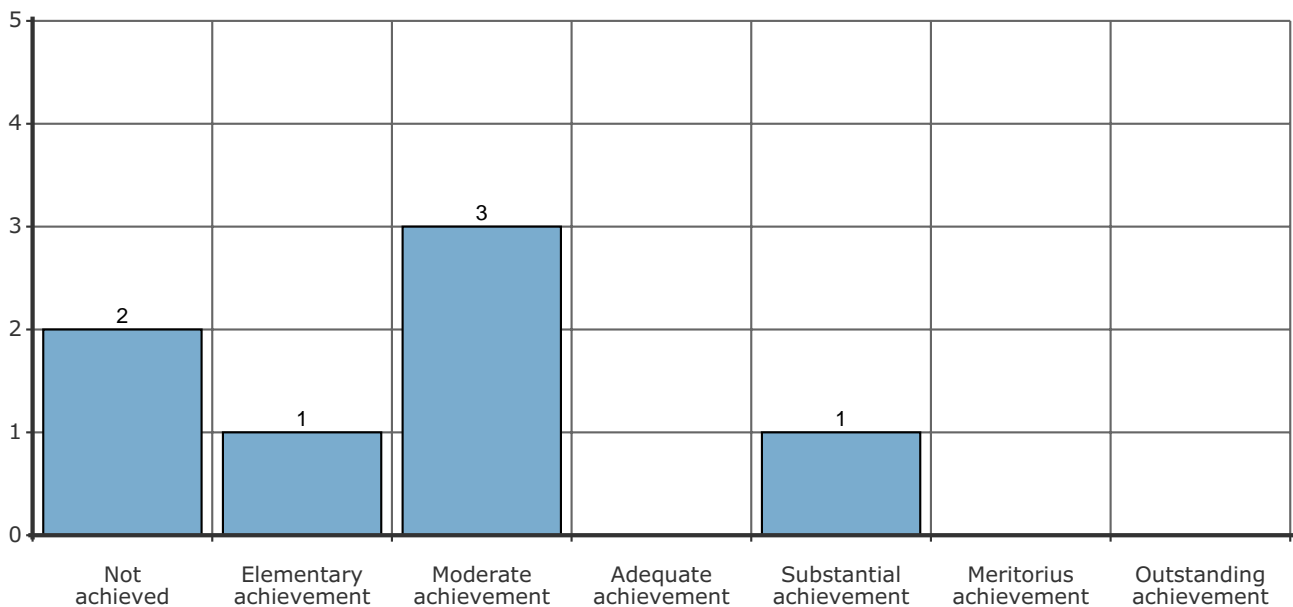
A1 - Learners per performance category

This report presents a graphic view of the distribution of scores of all the classes in a particular grade that participated in the testing. The number of learners in the class group is shown per performance category.

A1.1 - Mr Smith



A1.2 - Mrs Green

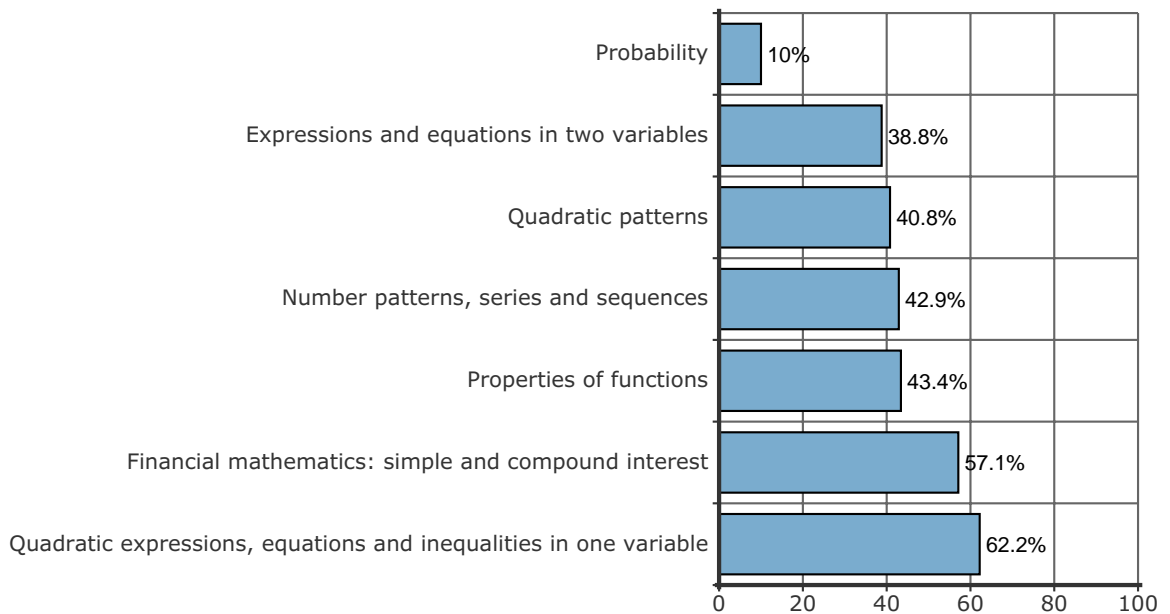


A2 - Performance per summary skill

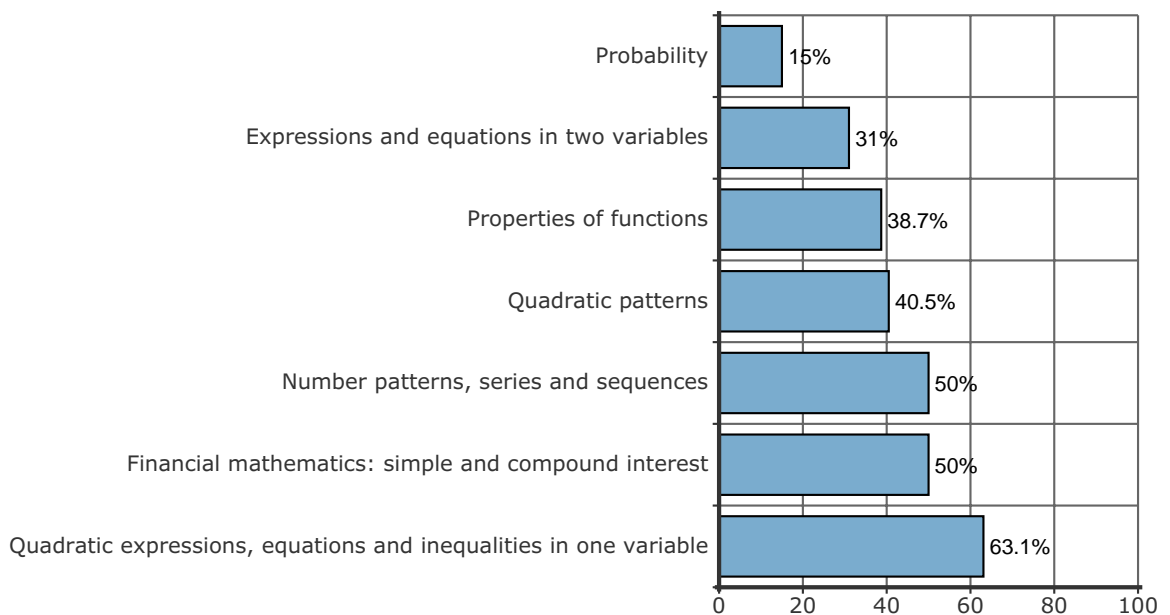
This report presents a view of the performance of the learners according to the summary skills tested. The summary skills are skills that consist of a number of sub-skills (the sub-skills report follows later). The scores in this report indicate the average percentage performance level in a summary skill (which consists of several sub skills).

The summary skills are ranked according to performance, from the skill with the lowest score to the skill with the highest score. This is to enable teachers to target the skills with the lowest scores for intervention.

A2.1 - Mr Smith



A2.2 - Mrs Green



A3 - Performance by sub skill per class

This report presents a view of the performance of the learners according to the sub-skills tested. The sub-skills are the smaller building blocks of the summary skills.

This is a granular view of the learners' performance. The grade level at which a sub-skill should have been acquired is also indicated. The sub-skills are ranked according to performance, from the lowest score to the highest score. This is to enable teachers to target the sub-skills with the lowest scores for intervention.

Key to colour coding:

Pink	Indicates scores between 0% and 39% in the sub skill (this is either "not achieved" or "elementary achievement" according to the 7-point rating scale).
Yellow	Indicates scores between 40% and 49% for the sub skill (this is a "moderate achievement" according to the 7-point rating scale).
Blue	Indicates individual learner scores of 50% and above in the sub skill.

Expressions and equations in two variables - Mr Smith		
Sub-skills	Grade	% Performance
Ability to write an equation in two variables in ratio form	10	28.6%
Ability to substitute to determine the values of the other variable	10	35.7%
Ability to factorise a trinomial with two variables	10	42.9%
Ability to solve for x in terms of y in linear equations with two variables	10	42.9%

Expressions and equations in two variables - Mrs Green		
Sub-skills	Grade	% Performance
Ability to solve for x in terms of y in linear equations with two variables	10	0.0%
Ability to write an equation in two variables in ratio form	10	0.0%
Ability to substitute to determine the values of the other variable	10	41.7%
Ability to factorise a trinomial with two variables	10	66.7%

Financial mathematics: simple and compound interest - Mr Smith		
Sub-skills	Grade	% Performance
Ability to compare different interest options; calculator skills.	10	28.6%
Ability to work with the effect of different periods of compounding growth	11	42.9%
Ability to do calculations involving percentages and exponents; calculator skills.	10	57.1%
Ability to do calculations involving percentages; calculator skills.	10	57.1%
Ability to use compound growth formulae $A = P(1 + i)^n$ to solve problems involving interest	10	71.4%
Ability to use simple growth formulae $A = P(1 + in)$ to solve problems involving interest	10	100.0%

Financial mathematics: simple and compound interest - Mrs Green		
Sub-skills	Grade	% Performance
Ability to work with the effect of different periods of compounding growth	11	25.0%
Ability to compare different interest options; calculator skills.	10	50.0%
Ability to use compound growth formulae $A = P(1 + i)^n$ to solve problems involving interest	10	50.0%
Ability to do calculations involving percentages and exponents; calculator skills.	10	66.7%
Ability to do calculations involving percentages; calculator skills.	10	66.7%
Ability to use simple growth formulae $A = P(1 + in)$ to solve problems involving interest	10	66.7%

Number patterns, series and sequences - Mr Smith		
Sub-skills	Grade	% Performance
Given the formula for T_n in a geometric sequence, calculate the value of a specific term	10	0.0%
Given the formula for T_n in a geometric sequence, prove that all the terms in the sequence are divisible by 3	10	14.3%
Given the formula for T_n in an arithmetic sequence, prove that all the terms in the sequence are divisible by 3	10	14.3%
Ability to use a calculator with an expression containing an exponent and a bracket	10	85.7%
Given the formula for T_n in an arithmetic sequence, calculate the value of a specific term.	10	100.0%

Number patterns, series and sequences - Mrs Green		
Sub-skills	Grade	% Performance
Given the formula for T_n in a geometric sequence, calculate the value of a specific term	10	0.0%
Given the formula for T_n in a geometric sequence, prove that all the terms in the sequence are divisible by 3	10	16.7%
Given the formula for T_n in an arithmetic sequence, prove that all the terms in the sequence are divisible by 3	10	33.3%
Ability to use a calculator with an expression containing an exponent and a bracket	10	100.0%
Given the formula for T_n in an arithmetic sequence, calculate the value of a specific term.	10	100.0%

Probability - Mr Smith		
Sub-skills	Grade	% Performance
Ability to calculate the probability of three dependent events by means of a tree diagram	11	0.0%
Ability to explain why two events are not mutually exclusive, based on calculation	10	0.0%
Ability to express $p(A \text{ and } B)$ in terms of $P(A)$, $P(B)$ and $P(A \text{ and } B)$	10	0.0%
Ability to display given data in a Venn diagram and to use this in order to calculate missing data	11	9.5%
Ability to calculate the probability of a complementary event, given the probability of the original event	10	28.6%
Ability to calculate $P(A \text{ and } B)$ for two independent events	10	42.9%

Probability - Mrs Green		
Sub-skills	Grade	% Performance
Ability to calculate $P(A \text{ and } B)$ for two independent events	10	0.0%
Ability to calculate the probability of three dependent events by means of a tree diagram	11	0.0%
Ability to display given data in a Venn diagram and to use this in order to calculate missing data	11	11.1%
Ability to explain why two events are not mutually exclusive, based on calculation	10	33.3%
Ability to express $p(A \text{ and } B)$ in terms of $P(A)$, $P(B)$ and $P(A \text{ and } B)$	10	33.3%
Ability to calculate the probability of a complementary event, given the probability of the original event	10	50.0%

Properties of functions - Mr Smith		
Sub-skills	Grade	% Performance
Ability to draw a rough sketch graph given information about a, b and c	11	0.0%
Ability to identify the values of x for which a parabola is decreasing.	11	0.0%
Ability to determine the equation of a parabola given the turning point and the y intercept	11	14.3%
Ability to evaluate the sum of output values of a function for given input values	11	14.3%
Ability to sketch a hyperbola	11	14.3%
Ability to understand the meaning of the constant term c in the equation $y = ax^2 + bx + c$	11	14.3%
Ability to calculate the x-value for a given y-value in an equation of a hyperbola	10	21.4%
Ability to identify the x-value of the turning point of a parabola.	11	28.6%
Ability to know that the axis of symmetry is $x = -b/(2a)$ and work out whether the axis of symmetry is positive or negative	11	28.6%
Ability to use gradient formula to find the average gradient between two points on a graph	10	42.9%
Ability to write down the equation of a reflection of a graph about the x-axis	11	42.9%
Ability to calculate values for y when x is known	10	57.1%
Ability to consider possible restrictions to the value of x in a variable fraction	10	57.1%
Ability to determine the equation of an asymptote in an exponential function	11	57.1%
Ability to determine the equations of asymptotes for a hyperbola	10	57.1%
Ability to understand the meaning of the coefficient a in the equation $y = ax^2 + bx + c$	11	71.4%
Ability to calculate the y-value for a given x-value in an equation of a hyperbola	10	85.7%
Ability to double the size of x in a function f(x) and find the equation of the new function f(2x)	11	85.7%
Ability to evaluate the output value of a function for a given input value	11	85.7%
Ability to identify gradient formula to find the average gradient between two points on a graph	10	85.7%
Ability to solve an exponential equation	10	85.7%

Properties of functions - Mrs Green		
Sub-skills	Grade	% Performance
Ability to draw a rough sketch graph given information about a, b and c	11	0.0%
Ability to identify the values of x for which a parabola is decreasing.	11	0.0%
Ability to sketch a hyperbola	11	8.3%
Ability to evaluate the output value of a function for a given input value	11	16.7%
Ability to evaluate the sum of output values of a function for given input values	11	16.7%
Ability to identify the x-value of the turning point of a parabola.	11	16.7%
Ability to know that the axis of symmetry is $x = -b/(2a)$ and work out whether the axis of symmetry is positive or negative	11	16.7%
Ability to determine the equation of a parabola given the turning point and the y intercept	11	25.0%
Ability to calculate the x-value for a given y-value in an equation of a hyperbola	10	33.3%
Ability to determine the equation of an asymptote in an exponential function	11	33.3%
Ability to understand the meaning of the constant term c in the equation $y = ax^2 + bx + c$	11	33.3%
Ability to calculate the y-value for a given x-value in an equation of a hyperbola	10	50.0%
Ability to consider possible restrictions to the value of x in a variable fraction	10	50.0%
Ability to double the size of x in a function $f(x)$ and find the equation of the new function $f(2x)$	11	50.0%
Ability to identify gradient formula to find the average gradient between two points on a graph	10	50.0%
Ability to understand the meaning of the coefficient a in the equation $y = ax^2 + bx + c$	11	50.0%
Ability to determine the equations of asymptotes for a hyperbola	10	66.7%
Ability to calculate values for y when x is known	10	83.3%
Ability to solve an exponential equation	10	83.3%
Ability to use gradient formula to find the average gradient between two points on a graph	10	83.3%
Ability to write down the equation of a reflection of a graph about the x-axis	11	83.3%

Quadratic expressions, equations and inequalities in one variable - Mr Smith		
Sub-skills	Grade	% Performance
Ability to simplify an algebraic expression containing exponents	11	14.3%
Ability to draw a number line to illustrate an inequality	10	28.6%
Ability to solve quadratic inequalities in one variable	10	28.6%
Ability to factorise quadratic expressions	10	71.4%
Ability to solve a system of linear equations	10	71.4%
Ability to perform calculations using a calculator	11	85.7%
Ability to solve simple quadratic equations	11	85.7%
Ability to use formula and identify the terms in the formula	9	85.7%
Ability to use formula and substitute numerical values into the formula	10	85.7%
Ability to multiply a monomial by a binomial	10	100.0%
Ability to write a quadratic equation in standard form $ax^2+bx^2+c=0$	10	100.0%

Quadratic expressions, equations and inequalities in one variable - Mrs Green		
Sub-skills	Grade	% Performance
Ability to draw a number line to illustrate an inequality	10	16.7%
Ability to solve quadratic inequalities in one variable	10	16.7%
Ability to simplify an algebraic expression containing exponents	11	41.7%
Ability to factorise quadratic expressions	10	66.7%
Ability to solve a system of linear equations	10	75.0%
Ability to multiply a monomial by a binomial	10	83.3%
Ability to use formula and identify the terms in the formula	9	83.3%
Ability to use formula and substitute numerical values into the formula	10	83.3%
Ability to write a quadratic equation in standard form $ax^2+bx^2+c=0$	10	83.3%
Ability to perform calculations using a calculator	11	100.0%
Ability to solve simple quadratic equations	11	100.0%

Quadratic patterns - Mr Smith		
Sub-skills	Grade	% Performance
Understand the second differences between the terms in a quadratic pattern	11	14.3%
Understand the first differences between the terms in a quadratic pattern	11	28.6%
Ability to set up and solve equations in one variable	11	38.1%
Understand that the second differences of a quadratic pattern are constant	11	57.1%
Use a verbal description to write the terms of a number pattern	10	71.4%

Quadratic patterns - Mrs Green		
Sub-skills	Grade	% Performance
Ability to set up and solve equations in one variable	11	22.2%
Understand that the second differences of a quadratic pattern are constant	11	33.3%
Understand the second differences between the terms in a quadratic pattern	11	33.3%
Understand the first differences between the terms in a quadratic pattern	11	50.0%
Use a verbal description to write the terms of a number pattern	10	100.0%