

26 February 2018

Megan Pledger
Fyi-request-7180-9be3b8b5@requests.fyi.org.nz

Dear Ms Pledger

Official Information Act Request

Thank you for your request of 2 February 2018, under the Official Information Act 1982, for the following information:

For the 4 external achievement standards for level 1 mathematics (91027 Algebra, 91028 TE&G, 91031 Geometric Reasoning, 91037 Chance & Data) for both 2016 and 2017, can you please tell me for each of them

- 1) How many candidates were entered for the assessment*
- 2) How many candidates did the assessment*
- 3) How many candidates were awarded achieved*
- 4) How many candidates were awarded merit*
- 5) How many candidates were awarded excellence.*

Attached as Appendix 1 is a table with the information requested for each standard, for 2016 and 2017. Please note that the 2017 figures are still provisional, and may increase slightly as students apply for review or reconsideration of their results. The statistics are finalised at the end of March 2018.

NZQA issued a media release regarding the Level 1 Mathematics and Statistics examination results on 16 January 2018, which included comparative statistics with 2016. This release is attached as appendix 2 for your information. Also note that some information has been withheld under section 9(2)(a) of the OIA, in order to "protect the privacy of natural persons".

If you require further assistance or believe we have misinterpreted your request, please contact Elizabeth Templeton in the Office of the Chief Executive, email elizabeth.templeton@nzqa.govt.nz or telephone (04) 463 3339.

If you are dissatisfied with our response, you have the right, under section 28(3) of the Official Information Act 1982, to lodge a complaint with the Office of the Ombudsmen, PO Box 10152, Wellington.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'K. Poutasi', is written over a light blue horizontal line.

Karen Poutasi (Dr)
Chief Executive

Encl.

Appendix 1

91027 – Apply algebraic procedures in solving problems (MCAT)

	N	A	M	E	Total NAME ¹ results	Total entries
Final 2016	6,059	12,586	10,814	4,234	33,693	35,466
Provisional 2017 ²	8,358	11,745	6,179	3,865	30,147	31,738

91028 – Investigate relationships between tables, equations and graphs

	N	A	M	E	Total NAME results	Total entries
Final 2016	5,480	12,170	7,497	3,012	28,159	31,188
Provisional 2017	7,200	8,634	6,044	3,120	24,998	29,311

91031 – Apply geometric reasoning in solving problems

	N	A	M	E	Total NAME results	Total entries
Final 2016	5,537	6,453	6,279	1,537	19,806	22,494
Provisional 2017	4,423	5,518	5,528	1,220	16,689	20,183

91037 – Demonstrate understanding of chance and data

	N	A	M	E	Total NAME results	Total entries
Final 2016	4,754	8,493	8,557	2,196	24,000	26,041
Provisional 2017	5,155	9,843	7,372	1,532	23,902	26,466

¹ N = Not achieved A = Achieved M = Merit E = Excellence

² The 2017 figures are provisional and may increase slightly as students apply for review or reconsideration of their results. The statistics are finalised at the end of March 2018.

Appendix 2

16 January 2018

New Zealand Qualifications Authority media statement: Provisional NCEA Level 1 Mathematics and Statistics examination results released

Approximately 143,000 students sat external examinations in November and December last year. There were 119 examinations, covering 230 standards spanning NCEA levels 1, 2 and 3, as well as New Zealand Scholarship. Approximately 39,900 students entered the NCEA Level 1 Mathematics and Statistics examinations.

The New Zealand Qualifications Authority (NZQA) has released provisional results for the 2017 NCEA Level 1 Mathematics and Statistics examinations.

Deputy Chief Executive Kristine Kilkelly says the high level of interest in last year's Level 1 Mathematics and Statistics examinations has prompted NZQA to release the provisional results ahead of the consolidated results being released in early April.

"Mathematics is an important subject. We want to make sure students have the opportunity to be successful in their studies and we support the work that teachers are doing to engage students in Mathematics.

"On the whole, students did well in externally assessed mathematics and statistics achievement standards across all three levels of NCEA.

"Provisional results for the NCEA Level 1 Mathematics and Statistics examinations in November show the majority of students who sat the examinations gained an Achieved or better grade for each standard."

Although there was some concern about the difficulty of standard 91031 (Apply geometric reasoning in solving problems), achievement in that standard – 73.5 percent of students – was similar to previous years. Achievement for standard 91037 (Demonstrate understanding of chance and data), 78.4 percent of students, was also similar to previous years.

Achievement in standard 91028 (Investigate relationships between tables, equations and graphs) was lower than previous years: 71.2 per cent of students gained an Achieved or better grade, compared to the past range of performance of 78.1–84 per cent. The proportion of students achieving Merit and Excellence for this standard was similar to previous years.

NZQA's analysis of provisional results indicates that some students found some parts of the examination paper for standard 91028 more difficult than expected. Changes to the assessment to better align it with the curriculum and the standard's focus on investigating relationships between tables, equations and graphs – including a greater focus on problem solving – were communicated to schools at the end of 2016 and during 2017.

"NZQA has taken the unusual step of announcing these provisional results early so we can respond to the concerns teachers raised with us in the open letter. Early in term 1 we will work with regional and national mathematics associations to discuss these results with teachers, talk about how the standards are assessed and their feedback on the assessments. We will involve the Ministry of Education, as the owner of the curriculum and standards," says Ms Kilkelly.

"We also want to reassure students before school starts for the year that not achieving one or more of their external standards will not prevent them from progressing to study Mathematics at Level 2. We encourage students to talk with their teachers, once school starts."

NZQA has also released the results for the Mathematics Common Assessment Task (MCAT), which is provided by NZQA for Level 1 students to sit in September and is marked by their teachers. The proportion

of students who gained an Achieved grade or better was 72.3 per cent, compared to 82 per cent in 2016. This is within the range of prior achievement.

Ms Kilkelly says achievement rates for the MCAT standard are more variable as it is not part of the main end of year external examinations. Achievement in the MCAT over the last five years has ranged from 72.2 per cent to 82 per cent. NZQA did not receive any indication from teachers or schools that students found the 2017 assessment more difficult than the 2016 MCAT.

“Nevertheless, we will carry out further analysis of the MCAT results and will discuss this analysis with teachers.”

Analysis of achievement results for NCEA Level 1 Mathematics and Statistics external examinations sat on 20 November

Standard	2017 Provisional results, combined Achieved, Merit and Excellence	Combined achievement range over previous 5 years	2016 final results, combined Achieved, Merit and Excellence
91028 Investigate Relationships Between Tables, Equations and Graphs	71.2%	78.1 - 84.0	80.5%
91031 Apply Geometric Reasoning to Solve problems	73.5%	71.5 - 75.6	72.0%
90137 Demonstrate Understanding of Chance and Data	78.4%	74.7 - 80.2	80.2%

Analysis of achievement results for NCEA Level 1 Mathematics Common Assessment Task sat in September

Standard	2017 Provisional results, combined Achieved, Merit and Excellence	Combined achievement range over previous 5 years	2016 final results, combined Achieved, Merit and Excellence
91027 Apply Algebraic Procedures in Solving Problems (MCAT)	72.3%	72.2 - 82%	82.0%

ENDS

Media contact:

Withheld under section 9(2)(a)