Contents to Newsletters 104 – 123

Newsletter 104 – 2006

Newsletter 105 – 2006

Newsletter 106 – 2006

Newsletter 107 – 2007

Newsletter 108 – 2008

Newsletter 109 – 2009

Newsletter 110 – 2010

Newsletter 111 – 2011

Newsletter 112 – 2012

Newsletter 113S – 2013

Newsletter 113 – 2013

Newsletter 114 – 2014

Newsletter 115 – 2017

Newsletter 116 – 2018

Newsletter 117 – 2019

Newsletter 118 – 2020

Newsletter 119 – 2021

Newsletter 120 – 2022

Newsletter 121 – 2023

Newsletter 122 – 2024

Newsletter 123 – 2025

Newsletter 104

Editorial		2
IMTA Council		3
IMTA Branches		4
Surfin' for Maths		5
A Survey of Members' Interest in Topics for the Newsletter		6
Fr. Ingram Memorial Lecture: *Second Level Maths Education in Ireland 2005 and beyond: 'Maths Questions'*	*Peter Tiernan, Dublin*	7
Some Innovative Projects to Watch Out For		10
Using Technology to Teach Mathematics	*Mary O'Donnell, Dublin*	11
Drawing on Pythagoras	*Neil Hallinan, Dublin*	13
Songs with Numbers in their Title	*Colette Nolan and friends, Dublin*	16
R.W. C.		18
NUIM Competition:courtesy of Maths Department, NUI Maynooth		
Senior Quiz		19
Junior Quiz		20
Senior Quiz Solutions		21
Junior Quiz Solutions		22
Ríomhaire agus Dúch – Planning for Junior Cert Foundation	*Neil Hallinan, Dublin*	23
Maths in Practice	*Neil Hallinan, Dublin*	29
Solutions to Leaving Certificate Higher Mathematics 2005	*Maurice O'Driscoll, Dublin*	30

Newsletter 105

Editorial 2

William Rowan Hamilton and the Quaternion Walk *Fiacre Ó Cairbre, NUI, Maynooth* 3

The Ballad of Rowan Hamilton *Jack Gannon, Cabra, Dublin* 14

The Benefactor *June Robinson, Dublin* 15

A Quaternionic Gem *Anthony G. O'Farrell, NUI, Maynooth* 16

William Rowan Hamilton: Contributions to Physics
Siddhartha Sen, Trinity College, University of Dublin 26

Mathematics in Practice *Neil Hallinan, Dublin* 28

The Best Card Trick Ever *Eamonn Flannery, Cork* 30

Mathematical Aspects of Irish Elections
Helmer Aslaksen, NUS, Singapore and Gary McGuire, NUI, Maynooth 40

Further Calculus and Series *Paul Holland, Galway* 60

Applied Mathematics Leaving Certificate Higher 2005 Solutions *John Maher, Dublin* 61

Newsletter 106

Editorial		2
Pythagoras	*Robert P. Crease, State University of New York*	3
Wise Words	*I.M.A. Worm*	5
Preparing for Subject Inspection	*Brendan O'Sullivan, Cork*	6
Primes	*Brendan O'Sullivan, Cork*	8
Customising Toolbars for Maths Teachers	*Horst Punzet, Dublin*	26
The Dame and the Knights of the Square Table	*Paul Behan, Kilkenny*	30
Irish Junior Maths Competition 2007 – Entry Form	*Michael D. Moynihan, Cork*	34
Estimating the Cost of Filling the 2006 GAA Players Sticker Album using Euler's Approximation for Harmonic Sums	*Kevin Hayes and Ailish Hannigan, University of Limerick*	35
A Record Prime and GIMPS		39
Solutions to Leaving Certificate Higher Mathematics 2006	*Maurice O'Driscoll, Dublin*	40

Newsletter 107

Editorial		2
Some Applications of Leaving Certificate Mathematics	*Donal Hurley, Cork*	3
Irish Junior Maths Competition 2008 - Entry Form	*Michael D. Moynihan, Cork*	16
Length : Area : Volume : Number	*Brendan Kearney, S.J., California*	17
Factoring Integer Quadratics	*Des MacHale, Cork*	22
Let there be light! The Professional Development of the Maths Teacher	*Brendan O'Sullivan, Cork*	27
Dynamic Geometry: a comparison of Euklid and Geometer's Sketchpad	*David Kearney, Dublin*	30
Mathematical Education Experiences	*Sinead Breen, Joan Cleary, Ann O'Shea, Dublin*	40
The Role of Language in the Demise of Logs	*Michael Brennan, Waterford*	44
Are You Ready for Maths Week?	*Neil Hallinan, Dublin; Eoin Gill, Waterford*	52
A Practical Application of Geometry	*Michael O'Loughlin, Navan*	53
Solutions to Leaving Certificate Higher Mathematics 2007	*Maurice O'Driscoll, Dublin*	54

Newsletter 108

Editorial		2
Maths is a Funny Subject	Fr. Ingram Memorial Lecture by Dr. Des MacHale *Report by Neil Hallinan*	3
Potential Uses of Datalogging in Mathematics Teaching	*Michael J.N. Delargey*	9
Websites to Try Out		15
Irish Junior Mathematics Competition	*Michael J. Moynihan*	16
A Mathematical Excavation	*Brendan O'Sullivan*	17
Snippets		20
$x^n - a^n$ and some associated horror stories	*Fr. Brendan Kearney S.J.*	21
Check This		24
A Practical Application of Matrix Multiplication	*Michael O'Loughlin, Navan*	25
International Standard Book Numbers (ISBN) Check Digit Scheme	*Timothy Hanley, Cork*	26
Maths Week		33
A Problem Of Differentiation	*Neil Hallinan, Dublin*	34
Using GeoGebra	*Neil Hallinan, Dublin*	40
For Younger Mathematics' Teachers	*Neil Hallinan, Dublin*	41
Mathematics of a Riddle and a Song	*Michael O'Loughlin, Navan*	44
A Response to '...The Demise of Logs'	*Michael O'Loughlin, Navan*	47
Newsletter 107 – Errata		48
Bonanza!		48
Leaving Certificate Results Over the Years 2001-2008	*Neil Hallinan, Dublin*	49
Solutions to Leaving Certificate Higher Mathematics 2008	*Maurice O'Driscoll*	50

Newsletter 109

Editorial		2
Problem Solving in Second Level Mathematics – The Finnish Experience	*Erkki Pehkonen*	3
A Practical Problem?		13
Groups and the Mosaics of the Alhambra	*Neil Hallinan*	14
Irish Junior Mathematics Competition Entry Form	*Michael Moynihan*	20
School Geometry	*Anthony G. O'Farrell*	21
Maths Week		28
The Importance of being Beautiful in Mathematics	*Fiacre Ó Cairbre*	29
Multiplication in Algebra Revisited	*John Courlander*	45
A Summary of Efficient Numerical Tests of Robin's Reformulation Of The Riemann Hypothesis - A Young Scientist Project	*Gary Carr, Graham McGrath, Daragh Moriarty*	46
Simple Cables – A Young Scientist Project	*Helen Iliff*	47
The First International GeoGebra Conference	*David Hobson*	48
Just for Fun	*John Courlander*	50
Ireland and the IMO (1988-2009)	*Gordon Lessells*	51
Solutions to Leaving Certificate Mathematics Higher Level 2009	*Maurice O'Driscoll*	59

Newsletter 110

Editorial		2
IMTA Branch Officers 2009/2010		3
Pure Mathematics and its Everyday Applications	*Thomas J. Laffey*	5
Multiplication Time-line	*Neil Hallinan*	13
Some Problems about Area and Perimeter	*Vassily I. Bernik and Anthony G. O'Farrell*	14
Perpendicular Distance of a Point from a Line – a Selection of Proofs of the Formula	*Andrew Pomeroy*	23
Measuring Area – from Rectangle to Triangle	*Michael O'Loughlin*	27
Jobs in Geometry	*Neil Hallinan*	30
Visualising Roots of a Complex Number	*Michael O'Loughlin*	31
A Right-angled Triangle and its Incircle	*Michael O'Loughlin*	35
Some Properties of the Mean and Standard Deviation	*Michael O'Loughlin*	37
Irish Junior Mathematics Competition, 2011 – Entry Form		41
Irish Junior Mathematics Competition, 2010: Report	*Mícheál D. Ó Muimhneacháin*	42
Top Scores in the Irish Junior Maths Competition, 2010	*Mícheál D. Ó Muimhneacháin*	43
The Emblem of the IMTA – from the archives		44
The Boyle Medal		44
The Pi Quiz	*Edward Williamson*	45
The Bookmaker's Code!	*Brendan O'Sullivan*	46
A Piece of π	*Brendan O'Sullivan*	48
Maths Week		49
Project Maths – a commentary	*Brendan O'Sullivan*	50
On the removal of Zero from the Natural Numbers	*Neil Hallinan*	52
Circle – Prime	*Neil Hallinan*	53
Cutting Edge Mathematics (and English)	*Neil Hallinan*	54
Enlargement or L.A.V.	*A.E. Mouse*	55
A Mathbox Matchbox	*Neil Hallinan*	56
Simpson's Rule	*John Courlander*	58
Radius of an Incircle – Simplified	*John Courlander*	60
A Look at Pythagorean Triples and Further Connections	*John Courlander*	62
Magic Numbers	*John Courlander*	63
New Maths and Old Mathematics	*John Courlander*	64
Leaving Certificate Mathematics (Project Maths) 2010, Model Solutions		65

Newsletter 111

Editorial		2
Industrial Applications of Mathematics	*Paul Sheridan*	3
Mathematical Puzzles	*Michael Moynihan*	16
Solutions (to Mathematical Puzzles)		18
Perpendicular Slopes – A Model	*Neil Hallinan*	20
The All-pervasive Quadratic Function	*Finbarr Holland*	21
When the Numbers Don't Add Up	*Brendan Prunty*	37
From the archives 1967: Why Mathematics? C. Lanczos	*Contributed by M. Moynihan*	40
Mathematics – A Timeline	*John Courlander*	48
Backward Teaching	*John Courlander*	51
Lessons from Finland	*Brendan O'Sullivan*	54
Review of the ATM Conference 2011	*Eoghan O'Leary*	57
So Close to Africa, so far from England	*Edward Williamson*	58
Product Review: Digital Grinds by Outstanding Solutions	*Eoghan O'Leary*	59
Cork Branch Annual Report September 2010 – August 2011		60
A Geometrical Problem	*John Courlander*	61
Makers of Mathematics	*John Courlander*	62
Time to go to the Moon	*John Courlander*	63
To Unreasonable Numbers	*Neil Hallinan*	64
Solution to A Geometrical Problem	*Neil Hallinan*	65
Top Scores in the Junior Maths Competition, 2011	*Mícheál D. Ó Muimhneacháin*	66
Junior Maths Competition, 2012 – Entry Form	*Mícheál D. Ó Muimhneacháin*	67
Reading Material	*Mícheál D. Ó Muimhneacháin*	68
Leaving Certificate Higher Mathematics (Project Maths) 2011 Model Solutions Paper One		69
Leaving Certificate Higher Mathematics (Project Maths) 2011 Model Solutions Paper Two		81

Newsletter 112

Editorial		2
IMTA Branch Officers 2011- 2012		3
In Sunshine and in Rain on the Atlantic Ocean	*Edward Williamson*	4
Education in the Land of the Alps	*Brendan O'Sullivan*	5
A Piece in Pilish!	*Neil Hallinan*	6
Review of 'Brainsnack' as a Classroom Resource	*Brendan O'Sullivan*	7
Ahead of the Posse with Pythagoras	*John Courlander*	8
Maths Week Ireland		9
Geometry and Invariance as a Problem-solving Tool	*Michael O'Loughlin*	10
The Point of lntersection of Two Touching Circles	*Michael O'Loughlin*	14
MathsFest 2012		15
Three Circles Touching Externally	*Michael O'Loughlin*	16
An Interesting Trigonometric Diagram	*Michael O'Loughlin*	19
Circles in a Semicircle	*Michael O'Loughlin*	20
Première Leçon de Mathématiques	*John o Dalkey*	24
Safecracker Puzzles	*John Courlander*	26
The Hailstone Sequence	Neil Hallinan	28
Irish Junior Mathematic s Competition, 2012 : Final	*Micheal D. Ó Muimlmeachain*	34
Answer Key: Irish Junior Mathematics, 2012: Final	*Micheal D. Ó Muimlmeachain*	39
Top Scores in the Irish Junior Maths Competition	*Micheal D. Ó Muimlmeachain*	40
On Problem Solving	*Micheal D. Ó Muimlmeachain*	40
Junior Maths Competition , 2013 - Entry Form	*Micheal D. Ó Muimlmeachain*	41
Appreciation : Joe Devine	*Sean Close*	42
Leaving Certificate Higher Mathematics (Project Maths) 2012,Model Solutions Paper I		43
Leaving Certificate Higher Mathematics (Project Maths) 2012, Model Solutions Paper II		59

Newsletter 113S (special)

The First Newsletter: June 1964		2
How We Began		3
My Visit to Athens	*J. R. Timoney*	6
The Second Newsletter: December 1964		11
Standing Committee		12
Report of Standing Committee and Reports from Branches		15
The Challenge of Mathematics	*Professor Halberstam*	24
Sets and Syllogisms	*Stephen O'Brien*	27
Some Ideas on Computers	*Rev. R. Ingram S.J.*	33
The Mathematics Conference in Oxford	*Sr. Mary Eustace O.P.*	38
Newsletter No. 47: October 1981 - Extracts		41
A Brief History of the Calculus	*Raymond J. McGivney*	42
Fairground Chances	*Brendan Kearney S.J.*	56
Newsletter No. 51: March 1983 - Extract		59
Pennies for your Thoughts	*Douglas Quadling*	60
Newsletter No. 58: April 1985 - Extracts		69
Isosceles Triangles and Equal Bisectors of the Base Angles	*J. R. Timoney*	70
Rabbit Mathematics	*Anthony G. O'Farrell*	74
Newsletter No. 70: May 1989 - Extract		85
The Use of a Theorem	*John Courlander*	86
Newsletter No. 79: 1992 - Extract		91
A Creative Mathematics Lesson Using Visual Guided Imagery	*Carrie Ann Westlin*	92
Newsletters No. 81 & 82: 1993 - Extract		105
Making Mathematics Less Dotty	*Des MacHale*	106

Newsletter 113

Activities of the IMTA Council 2012-2013		3
Accenture Awards		4
From Josephus to Fionn MacCumhaill: Fr. Ingram Memorial Lecture	*From the Talk by Nollaig Ó Donnabháin*	5
Freedom in Mathematics and its Educational Value	*Fiacre Ó Cairbre*	8
Shakunta la Devi	*Neil Hallinan*	15
MathsFest 2012 – Report	*Cork Branch*	16
The Ambiguous Case of the Sine Rule	*Michael O'Loughlin*	18
Analemma - What's That? (Parts 1, 2, 3, 4)	*Neil Hallinan*	21
In Need of Mental Stimulation	*Michael Moynihan*	46
Irish Junior Mathematics Competition 2013 – Final with Answers		52
Top Scores in the Irish Junior Mathematics Competition 2013	*Micheal D. Ó Muimlmeachain*	58
Irish Junior Maths Competition 2014 – Entry Form	*Micheal D. Ó Muimlmeachain*	59
Review of 'themathstutor.ie' as a Teaching and Learning Resource	*Brendan O'Sullivan*	60
Comenius Project: Is e-learning in Maths for Students Across Europe Possible?	*Colin Townsend*	62
Maths Week Ireland		67
Jessica's IMO Report, 2013	*Jessica Weitbrecht*	68
Notes on The International Mathematical Olympiad, 2013	*Compiled by Neil Hallinan*	78
Note on the Use of Marking Schemes	*Newsletter Editor*	79
The Meaning of Maths: Reflections on Mathematical Education	*Siddharta Sen*	80
Induction Without Assumption	*Michael O'Loughlin*	89
“A Salutary Lesson”	*Finbarr Holland*	90
Solutions to Exercises given in 'A Salutary Lesson'	*Finbarr Holland*	94
A Cracking Puzzle	*Neil Hallinan*	96

Newsletter 114

Editorial		2
Notes from Council		3
A Special Presentation to Fr. Brendan Steen C.M.		3
Address to IMTA 50th Anniversary Celebration by President Michael D. Higgins		4
Fr. Ingram Memorial Lecture: 'Celebrating the past, embracing the present, and preparing for future change.'	*Elizabeth Oldham*	6
A big 'thank you' to Neil Hallinan	*Elizabeth Oldham*	9
A Construction Activity	*Michael O'Loughlin*	10
The Mathematics of Snooker	*Neil Hallinan*	14
Geometry in the Transition from Primary to Post-Primary *Patrick D. Barry and Anthony G. O'Farrell*		22
Awards and Competitions: Accenture Award; The IMO in Cape Town; Team Math 2014; John Hooper Medal in Statistics; Peter's Problem; The Pi Quiz		40
En passant' – Look! No Calculator!		41
Irish Junior Mathematics Competition: Questions, Solutions, Results	*Michael Moynihan*	42
Irish Junior Mathematics Competition 2015 Entry Form	*Michael Moynihan*	53
A Cracking Puzzle: Solution	*Neil Hallinan*	54
Fr. Brendan Kearney: An Appreciation		62
Street Math	*Robin Harte*	63
The Fields Medal, 2014		63
Have You Tried Virtual Manipulatives?		64
This Puzzle is a Killer	*Neil Hallinan*	64
IMTA 50th Jubilee Celebration and MathsFest Photos		65
Peter's Problem 2013 – 2014: The Problem and Solution	*Dominic Guinan & Committee*	69
Reflections following the 'Fail Better' Exhibition	*Neil Hallinan*	76
Developing Problem-solving Approaches to Teaching: Theory and Practice	*Aoibhinn Ní Shuilleabháin*	79
The IMTA Archives		82
The Poisoned Wine Problem – Solution	*Neil Hallinan*	83

Newsletter 115

Peter's Problem 2015	*Dominic Guinan & Neil Hallinan*	2
Peter's Problem 2015 – Solution	*Neil Hallinan & Dominic Guinan*	4
The Maths of a Rigged Roulette Wheel	*Calum O'Donnell, Patryk Lis & Kieran Murphy*	6
Mathematics at the Edward Worth Library	*Elizabethanne Boran*	9
Mathematics comes to the aid of Cell Biology	*Martin Steer*	14
Mathematics comes to the aid of Cell Biology II	*Martin Steer*	19
Unsolved problems in mathematics and their educational value	*Fiacre O´ Cairbre*	24
Lesson Study – A Mechanism for Maximizing Teaching Mathematics through Problem Solving	*Anne Brosnan*	33
Mathematics Education at Croke Park – CERME 10	*Maurice OReilly*	41
Linear Regression – an Introduction	*Cian O'Loughlin*	49
Peter's Problem 2016	*Neil Hallinann & Dominic Guinan*	57
Peter's Problem 2016 – Solution	*Dominic Guinan & Neil Hallinann*	59

Newsletter 116

Maths Counts 2018 Report — *Maths Development Team PDST* — 3

Peter's Problem 2017 — *Dominic Guinan & Neil Hallinan* — 16

Peter's Problem 2017 – Solution — *Neil Hallinan & Dominic Guinan* — 17

Extensions of Escott's Infinite Product Method for Calculating Square Roots — *Yaduvir Harhangi* — 21

Rev. Brendan P Steen C.M., 1921–2015 — *Olivia Bree & Elizabeth Oldham* — 29

Counting . . . As Easy as 1, 2,3? — *Neil Hallinan* — 34

Envisioning New Horizons for Mathematics and Computer Science Education — *Cornelia Connolly & Tony Hall* — 41

Students' Positive Engagement with Euler's Mathematical Demonstrations — *Ciarán Mac an Bhaird* — 44

MathsFest 2017 — *Brendan O'Sullivan* — 49

Generalisations of *n*-Space Geometric Projections and Transformations — *Adam Kelly & Sam Enright* — 52

John Courlander (1920–2018) — *The Dublin Branch* — 63

Minus minus and minus by minus — *Michael O'Loughlin* — 64

Newsletter 117

Peter's Problem 2018	*Neil Hallinan & Dominic Guinan*	3
Peter's Problem 2018 – Solution	*Dominic Guinan & Neil Hallinan*	5
A Mathematical Analysis of the Evolution of Rhythmic Cadence in Rap Music	*Matthew Blakeney*	11
Teaching the Shakespeare of Mathematics	*Neil Hallinan*	22
Peter's Problem 2019	*Dominic Guinan & Neil Hallinan*	24
An interest in *e*	*Cian O'Loughlin*	30
Report on Maths Counts 2019	*Stephen Gammell*	34
There is something about $\sqrt{2}$	*Neil Hallinan*	37
On the Difference of Two Squares	*Michael O'Loughlin*	45
Report on MathsFest 2018	*Seán Murphy*	50
How Mathematics was taught 120 years ago	*Michael O'Loughlin*	53
A Note on Pythagoras	*Michael O'Loughlin*	64

Newsletter 118

IMTA Council 2019 – 2020		3
IMTA Branches 2019 – 2020		4
The Emblem of the IMTA	*from the Archives*	5
First Year Maths Competition 2020 Reginal Round		7
Teams Maths Quiz 2020 Reginal Round		10
On Triangles inscribed in the Unit Circle	*Finbar Holland*	16
60th Maths Olympiad in Bath, England		31
Peter's Problem 2020		34
Visualising Sums	*Ronan Flatley*	39
Transposition of formulae: the challenge of not 'moving'	*Maryna Lishchynska, Catherine Palmer and Julie Crowley*	47
A little-used Formula	*Paul Holland*	49
Peter's Problem 2021		52

Newsletter 119

IMTA Council 2020 – 2021 3

IMTA Branches 2020 – 2021 4

Welcome from Chairperson 5

Junior Maths Competition 2021 Regional and Final 7

Euler: a mathematician without equal and an overall nice guy *Peter Lynch* 18

Numeracy in the Post-Primary Curriculum – Teachers Are Diving Deep!

Cornelia Connolly, Enda Donnelly, Stephen Gammell, Warren McIntyre, Enda Carr, Seamus Knox 20

Death and Taxes … *Paul Holland* 24

Peter's Problem 2020 – Solutions 28

Teachers' self-perceptions of mathematical knowledge for teaching at the transition between primary and post-primary school

Niamh O'Meara, Mark Prendergast, Ian Cantley, Lorraine Harbison & Clare O'Hara 40

The gender gap in post-primary mathematics *Aidan Roche* 61

Newsletter 120

IMTA Council 2021 – 2022 3

IMTA Branches 2021 – 2022 4

Welcome from Chairperson 5

Junior Maths Competition 2022 8

The Monte Carlo Method of Integration *Peter Lynch* 19

Peter's Problem 2021 – Solutions 23

A profile of Irish second year post-primary students' knowledge of initial algebra
Aoife O'Brien and Máire Ni Riordáin 35

Peter's Problem 2022 – Solutions 44

Codes and Ciphers *Ronan Flatley* 59

Team Maths 2022 Regional Round 67

Team Maths 2022 Final 73

Learning Loss in Mathematics: Irish Teachers' Perspectives on the Effects of the Pandemic
Aibhín Bray 86

Lifting the Lid on the Grinds Culture in Ireland A Focus on Mathematics
Laura Lynne Duffy; Mark Prendergast; Niamh O'Meara; and Iseult O'Rourke 95

Newsletter 121

IMTA Council 2022 – 2023 3

IMTA Branches 2022 – 2023 4

Welcome from Chairperson 6

Junior Maths Competition 2023 8

Peter's Problem 2023 15

Team Maths 2023 Regional Round 27

Team Maths 2023 National Final 44

Submission to Joint Oireachtas Committee 51

Results of IMTA Members' Survey 56

What's the point? Impact of Ireland's bonus points initiative on student profile in mathematics classrooms *Niamh O'Meara; Mark Prendergast; and Páraic Treacy* 58

π Quiz 2023 Regional Round 81

π Quiz 2023 National Final 90

Undergraduate Mathematics Students' Reflections on School Mathematics Curricula after a Major Curriculum Change in Ireland *Elizabeth Oldham and Aibhín Bray* 101

Education Technology, Artificial Intelligence, and the Mathematics Classroom *Cillian Ó Murchú and Cornelia Connolly* 108

Newsletter 122

IMTA Council 2023 – 2024		3
IMTA Branches 2023 – 2024		5
Welcome from Chairperson		6
Maggie Gough Competition 2023		8
IMTA 50th Anniversary Celebrations		19
IMTA 50th Anniversary Speech	*Elizabeth Oldham*	21
How We Began (from Newsletter Number 1)		24
First Year Mathematics Competition 2024		25
Peter's Problem 2024		33
Team Maths 2024 Regional Round		50
IMTA 60th Anniversary Celebrations		58
IMTA 60th Anniversary Speech	*Ciarán Duffy*	59
π Quiz 2024 Regional Round		63
NCCA Submission Early Enactment Feedback on Junior Cycle Mathematics		70
π Quiz 2024 National Final (with solutions)		77
Problems for Teachers? Views of Members of the Mathematics Teachers' Association on Current Issues in Mathematics Education	*Ciarán Duffy and Elizabeth Oldham*	88
Team Maths 2024 National Final (with solutions)		95
IMTA Bursaries		109
A Critical Analysis of the Applied Mathematics National Professional Development Programme and its Implications for Transforming Pedagogy in Mathematics Education	*Eoghan Long*	110
IMTA Revision Classes		113

Newsletter 123

IMTA Council 2024 – 2025 3

IMTA Branches 2024 – 2025 5

Welcome from Chairperson 6

Maggie Gough Competition 2025 9

Unlocking the potential of play: Enhancing student resilience and engagement with Blooket 19
Ciara McKevitt

First Year Mathematics Competition 2025 24

Peter's Problem 2025 31

Mathematician and artist with Kilkenny in his heart 49

Team Maths 2025 Regional Round 50

Quadratics Revisited *Des MacHale and Peter MacHale* 60

π Quiz 2025 Regional Round 64

Dublin branch news 78

π Quiz 2025 National Final 81

The International Congress on Mathematical Education: One participant's story
Elizabeth Oldham 95

Cork branch news 99

Team Maths 2025 National Final 100