

# *Learn. Energise. Connect.*

## IB<sup>®</sup> FREE Mini Conference, Melbourne 2019

**Venue:** Mantra Bell City, 215 Bell St, Preston. Victoria.

**Date:** Wednesday, 4<sup>th</sup> December 2019

The main objective of the mini conference is to introduce quality ways of using TI-Nspire™ Technology in the teaching of some key topics in the two new SL and HL Mathematics courses. In addition, HL teachers will have an opportunity to consider ways of preparing their students for the new Paper 3.

### **Program:**

Registration:	7:45am	to	8:25am	Collect Attendee Gifts
Opening:	8:30am	to	9:00am	Prize Draw!
Morning Tea	9:00am	to	9:20am	
Session 1:	9:30am	to	10:30am	
Session 2:	10:40am	to	12:25pm	
Lunch:	12:30pm	to	1:15pm	
Session 3:	1:20pm	to	2:50pm	
Session 4:	3:00pm	to	4:15pm	

Catering and Certificate of Participation will be provided.

**Register at [www.bit.ly/IBMel19](http://www.bit.ly/IBMel19) Places strictly limited!**

**Registrations close: Monday 25<sup>th</sup> November**

For more information, email [teacher-support@list.ti.com](mailto:teacher-support@list.ti.com) or call **1300 138 140**



**Workshop Choices**

<b>1</b>	<b>Introducing TI-Nspire™ CX II and the 5.0 Software</b>	Come along and find out what's new with the TI-Nspire™ CX II and the 5.0 software and how they both relate to the new IB® Mathematics courses. This informative and collaborative session is designed to help IB® Mathematics teachers decide on which calculator that best suits their teachers and students moving forward.
<b>2A</b>	<b>Teaching Calculus in Analysis and Approaches</b>	The new Mathematics: Analysis and Approaches subject demands a strong and rigorous approach towards the teaching and learning of calculus at the SL and HL levels. In this session, we will show how TI-Nspire™ technology can be used to explore, visualise and help explain some important calculus concepts in the SL and HL courses. Topics covered include limits, graphical interpretation of first and second derivatives, optimisation, kinematics, L'Hopital's rule and Euler's method.
<b>2B</b>	<b>Modelling in Applications and Interpretation</b>	The new Mathematics: Applications and Interpretation subject places a strong emphasis on developing, applying and interpreting results derived from a variety of mathematical models at the SL and HL levels. In this session, we will use TI-Nspire™ technology and real-life data to develop and use a variety of mathematical models from the new course. A central focus of the session is to explore and understand how parameters affect the behaviour of a function.
<b>3A</b>	<b>Teaching Finance and More Advanced Graphing in Analysis and Approaches</b>	The new Mathematics: Analysis and Approaches contains a section on financial applications of geometric sequences and series including compound interest and annual depreciation. In the first part of this session we will use TI Nspire™ technology to solve some problems in financial mathematics. In the remainder of the session, we will introduce and use some more advanced graphing skills relevant to the new course.
<b>3B</b>	<b>Teaching Statistics and Matrices in Applications and Interpretation</b>	The new Mathematics: Applications and Interpretation course has a strong focus on the teaching and learning of statistics and matrices at the SL and HL levels. In this session, we will show how TI-Nspire™ technology can be used to teach important statistical and matrix concepts in the SL and HL courses. The two main areas covered are bivariate data analysis including various forms of regression and transition matrices.
<b>4A</b>	<b>Paper 3 in Applications and Interpretation HL</b>	The new Mathematics: Applications and Interpretation course has a Paper 3 which is very different in structure and assessment objectives from the current Paper 3. The new Paper 3 will aim to assess a student's ability to apply their mathematical knowledge in context with a strong emphasis on interpretation and explanation of mathematical results. In this session, we will use TI-Nspire™ technology to work through some Paper 3 style question parts. Towards the end of the session, we will briefly discuss and share ideas for resources on how to best prepare our students for this paper.
<b>4B</b>	<b>Paper 3 in Analysis and Approaches HL</b>	The new Mathematics: Analysis and Approaches course has a Paper 3 which is very different in structure and assessment objectives from the current Paper 3. The new Paper 3 will aim to assess a student's ability to apply their mathematical knowledge in situations often requiring exploration leading to generalisation. In this session, we will use TI-Nspire™ technology to work through some Paper 3 style question parts. Towards the end of the session, we will briefly discuss and share ideas for resources on how to best prepare our students for this paper.