

IB Math SL Intensive Revision Program

[Final Exam – May 2018]

Conducted by – Mr. Dileep Wijewardena (BEng.) of Learn Tuition Centre

Dates – 3rd Feb 2018 to 28th April 2018 (Every Sat 1.00pm-3.00pm)

Location – TMC Academy – 250 Middle Road, 188983

“A well organized, comprehensive math SL revision program for students who are aiming for an above average grade”

Join our Intensive Revision Program and learn how to:

- Quickly revise syllabus and complete problems for all of the topics.
- Practice past year papers, get them marked by a teacher.
- Solve problems that are non-familiar and exam focused.
- Work faster and smarter in the exam and achieve a top grade.

How it Works:

- You can attend any of the sessions of your choosing, call us or text us @98565036 or register online at www.learntuition.sg to reserve your seat.
- 2 hours per session, maximum 10 students per session.
- Fees - \$60/hour per student (\$120 per session), to be settled on or before the date.
- Printed questions and worksheets will be provided during the session; the teacher will guide you through the material.
- Students are given a set of past year papers each session to be completed before the next session.
- Past papers will be marked with comments and returned to the student during the following session.

Summary of Sessions:

Session	Revision Topic	Date	Time
1	Algebra	03 rd Feb 2018	1.00pm - 3.00pm
2	Functions and Equations 1	10 th Feb 2018	1.00pm - 3.00pm
3	Functions and Equations 2	24 th Feb 2018	1.00pm - 3.00pm
4	Circular functions and trigonometry - 1	03 rd March 2018	1.00pm - 3.00pm
5	Circular functions and trigonometry - 2 / Vectors - 1	10 th March 2018	1.00pm - 3.00pm
6	Vectors - 2	17 th March 2018	1.00pm - 3.00pm
7	Statistics and Probability -1	24 th March 2018	1.00pm - 3.00pm
8	Statistics and Probability -2	31 st March 2018	1.00pm - 3.00pm
9	Statistics and Probability -3	7 th April 2018	1.00pm - 3.00pm
10	Calculus - 1	14 th April 2018	1.00pm - 3.00pm
11	Calculus - 2	21 st April 2018	1.00pm - 3.00pm
12	Calculus - 3	28 th April 2018	1.00pm - 3.00pm

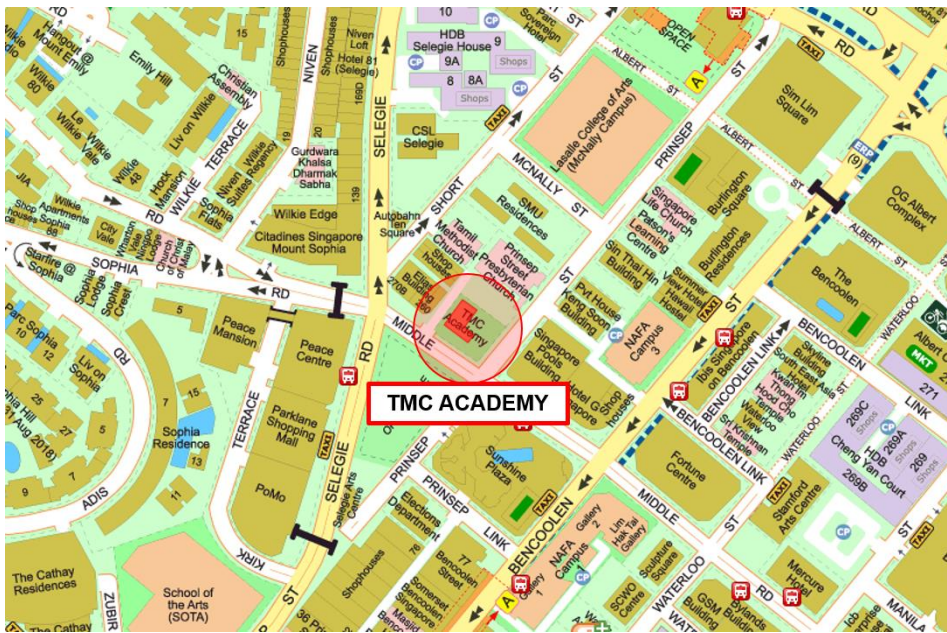
Revision Topics Description:

Session	Revision Topic Description	Date
1	Algebra <ul style="list-style-type: none"> Sequences and series – Arithmetic, geometric, sigma notation, non-arithmetic and geometric sequences, modeling sequences Exponents and logarithms – Operations with log and exponents, solving equations Binomial theorem – Finding terms, general $(n+1)^{\text{th}}$ term, finding a, b or n. 	03 rd Feb 2018 Saturday
2	Functions and Equations - 1 <ul style="list-style-type: none"> Domain range, composite, identity, inverse Graphs of functions max, min, asymptotes, inverse, sketch using GDC, solving equations of graphs Graph transformations - translations, reflections, stretches, composite transformations 	10 th Feb 2018 Saturday
3	Functions and Equations - 2 <ul style="list-style-type: none"> Quadratic functions and transformations Reciprocal functions Exponential and logarithmic functions and transformations, growth, decay Applications of graphing skills 	24 th Feb 2018 Saturday
4	Circular functions and trigonometry - 1 <ul style="list-style-type: none"> Circle, radian measure, arcs and sectors Solution of triangles - Sine rule, cosine rule area of a triangle, bearings, angles of elevation and depression Unit circle, definitions of sine, cosine and tan, Common trig ratios Trigonometric Identities Solving trigonometric equations 	3 rd Mar 2018 Saturday
5	Circular functions and trigonometry – 2 / Vectors - 1 <ul style="list-style-type: none"> Circular functions (sine and cosine), transformations and applications Vectors in 2D and 3D, vector algebra, magnitude, unit vectors, distance between two points Scalar Product, perpendicular and parallel vectors, angle between two vectors 	10 th Mar 2018 Saturday
6	Vectors - 2 <ul style="list-style-type: none"> Vector equation of a line in 2D and 3D, angle between two lines Distinguishing if two vectors are parallel, coincident or skew, point of intersection of two lines Applications of vectors - displacement, velocity and speed 	17 th Mar 2018 Saturday

Session	Revision Topic Description	Date
7	Statistics and Probability -1 <ul style="list-style-type: none"> Data representation for continuous and discrete data -histograms, box and whisker plots. population, sample Statistical measures of central tendency - mean, median, mode, quartiles. Effect of changes to original data, applications Cumulative frequency and its graphs, median, quartiles and percentiles Linear correlation and bivariate data, r value, line of best fit, Equation of the regression line use of GDC 	24 th Mar 2018 Saturday
8	Statistics and Probability -2 <ul style="list-style-type: none"> Probability of events- trails, outcomes. Venn diagram and tree diagrams Combined events, mutually exclusive events, conditional probability, Independent events, probability laws Discrete random variables, expected value 	31 st Mar 2018 Saturday
9	Statistics and Probability -3 <ul style="list-style-type: none"> Binomial distribution, mean and variance of a binomial distribution Normal distribution curves, standardised normal variables (z distribution) Mixed statistics and probability problems 	7 th April 2018 Saturday
10	Calculus - 1 <ul style="list-style-type: none"> Limits and convergence, derivation from first principles, gradients and tangents Derivatives of x^n, $\sin(nx)$, $\cos(nx)$, $\tan(nx)$, e^{nx} and $\ln(nx)$. Chain rule, product rule, quotient rule, second derivative, higher derivatives Graphs - maximums, minimums, points of inflexion, relationship between derivatives, optimisation applications 	14 th April 2018 Saturday
11	Calculus - 2 <ul style="list-style-type: none"> Indefinite integration, indefinite integrals, integration by inspection or substitution Anti-differentiation with boundary conditions, definite integrals Area under the curves, use of GDC 	21 st April 2018 Saturday
12	Calculus - 3 <ul style="list-style-type: none"> Volumes of revolution, use of GDC Kinematics problems, total distance travelled Mixed integration and differentiation problems 	28 th April 2018 Saturday

Getting to TMC Academy:

TMC Academy is conveniently located at 250 Middle Road.



Nearby Landmarks:

Sunshine Plaza
Peace Centre
Lassalle College of the Arts
SOTA
Fortune Centre
NAFA

By Train:

NE 6 NS 24 CC 1 Dhoby Ghaut
11 mins

DT 21 Bencoolen
5 mins

DT 13 Rochor
6 mins

EW 12 DT 14 Bugis
10 mins

By Bus:

07011 Selegie Road - Peace Ctr – Service No. 64, 65, 131, 139, 147, 166, 857

07571 Middle Road – Opp Prime Ctr – Service No. 56

07518 Bencoolen St – Fortune Ctr – Service No. 56, 131 147, 166, 857, 980

07531 Rochor Canal Road – Rochor Stn – Service No. 23, 48, 66, 66A, 66B, 67, 67A, 170, 170A, 851, 960, 980

Facilities:



- Air conditioned classrooms with white board and projector
- Vending machines within the building and ample eateries surrounding the premises