

Sequence:
3, 5, 7, 9, ...
1st term, 2nd term, 3rd term, 4th term
(“one”, “two”, or “three” mean the same thing)
Three dots mean goes on forever (infinite)



Arcs & Sectors

Surface Area & Volume

Congruence

Similar Shapes

Transformations

- Reflection
- Rotation
- Translation
- Enlargement

Vectors

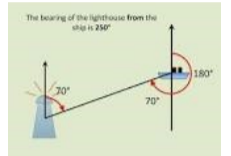
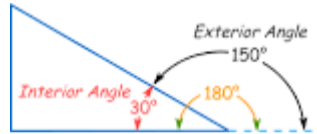
Sequences

Forming & solving Equations

Direct & Inverse Proportion



Circles



Constructions

Loci

Plans & Elevations

Probability Trees

Probability

Pie Charts

Sampling

Interior & Exterior Angles

Alternate/Corresponding Angles

Bearings

Distance = Speed x Time

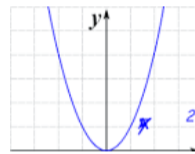
Speed = Distance / Time

Time = Distance / Speed

Average Speed = Total distance travelled / Total time taken

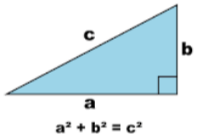
Sample Units:
Speed - m/s
Distance - metres
Time - seconds

Triangle: D (top), S (left), T (right)



Trigonometry - Missing Sides & Angles

Pythagoras



Time Series

Straight Line Graphs

Quadratic Graphs

Coordinate Geometry

Speed, Distance, Time

Compound Measures

Real Life Graphs

Scatter Graphs

Height, h (cm)	Frequency
150 < h ≤ 160	14
160 < h ≤ 170	50
170 < h ≤ 175	32
175 < h ≤ 180	19
180 < h ≤ 190	8

Cubic Graphs

addition: $x + 5 = 10$
variable: x, value: 5, 10
what 'x + 5' is equal to: 10

$13 \times 15 = (x+3)(x+5)$
 $x^2 + 5x + 3x + 15$

Frequency Diagrams

Averages from Grouped Data

Averages from a Table

Averages

Rearranging Equations

Solving Equations

Factorising

Expand & Simplify



$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$
 $\frac{1}{3} + \frac{1}{4} = \frac{7}{12}$

Rules of Indices
For a, b, c, n, p, q

Rule	Example
$a^m \times a^n = a^{m+n}$	$2^3 \times 2^4 = 2^7 = 128$
$a^m \div a^n = a^{m-n}$	$2^5 \div 2^2 = 2^3 = 8$
$(a^m)^n = a^{m \times n}$	$(2^3)^4 = 2^{12} = 4096$
$a^0 = 1$	$2^0 = 1$
$a^{-1} = \frac{1}{a}$	$2^{-1} = \frac{1}{2}$
$a^m \times (a^n)^p = a^{m+n \times p}$	$2^3 \times (2^4)^2 = 2^3 \times 2^8 = 2^{11} = 2048$

Standard Index Form

Percentage of an Amount

Interest & Growth

Depreciation & Decay

Using a Calculator

Reverse Percentages

Fractions +/-

Ratio

Proportion (Recipes)

Estimation

Rounding & Error Intervals

Exchange Rates

Best Value

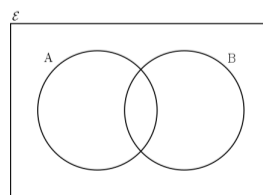
Multiples in Context

Product of Prime Factors

Venn Diagrams

Frequency Trees

Two Way Tables



What is your favorite sport to watch on television?

	Football	Basketball	Baseball
Males	40	22	15
Females	12	16	45
Total	52	38	60

Currency

Currency	Rate
US Dollar	31.51
Singapore Dollar	23.46
日本円 (100)	25.83
人民币	...

Year 10 & 11

