



GCSE Foundation B Maths



South Lincolnshire Academies Trust

Learning Journey



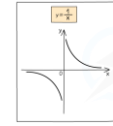
A good maths GSE at grade 4 will support your application for college and sixth form courses, apprenticeship and job opportunities.



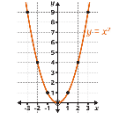
Written Exam
3 Papers

Exam Questions and
Techniques

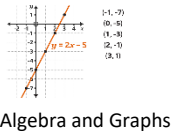
Algebra Review



Sketching Graphs



Quadratic Graphs



Algebra and Graphs

$$2x - 3 = -7$$

YEAR 12+

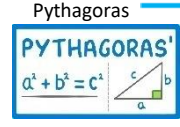
Revision

Standard Form
 2.9×10^1
 3.50×10^2

H	T
HH	HT
TH	TT

Probability and Statistics
Revision

Geometry and Measures
Revision

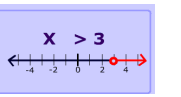


Pythagoras
PYTHAGORAS!
 $a^2 + b^2 = c^2$

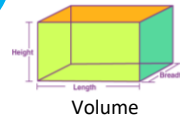
Number
Revision

The covers of 2:
2 = 2 x 1
4 = 2 x 2
6 = 2 x 3
8 = 2 x 4
10 = 2 x 5
12 = 2 x 6
14 = 2 x 7
16 = 2 x 8
18 = 2 x 9
20 = 2 x 10

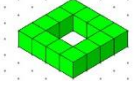
Inequalities



6, 10, 14, 18, 22
Sequences
 $+4$ $+4$ $+4$ $+4$



Volume



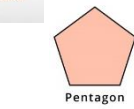
2D Representations of 3D shapes

Properties of Polygons

YEAR 10

Ratio and Proportion Review

RATIOS
compare VALUES
PROPORTIONS
compare RATIOS

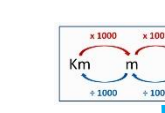


Properties of Polygons

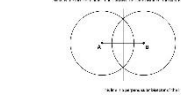
2D Representations of 3D shapes

Further Circumference and Area

radius r
 $C = 2\pi r$
 $A = \pi r^2$



Measures



Constructions and Loci

Calculating with Percentages

Ratio and Proportion
 $20 : 32$
 $\div 4$ $\div 4$
 $5 : 8$

Perimeter and area
 $A = \frac{bh}{2}$
 $= \frac{6 \times 8}{2}$

Circumference and Area
radius r
 $C = 2\pi r$
 $A = \pi r^2$



Positive correlation
As one variable increases so does the other variable.

Scatter graphs

Expanding
 $2(g + 4)$
 $= 2g + 8$

Algebra Recap
and Extension

Collecting and
Representing Data



List of Indices Laws

Indices

Angles
 62°

Co-ordinates and
Linear Graphs

Equations
 $2x - 3 = -7$

Equations

Basic Algebra
 $6x + 2 = 2(3x + 1)$

Basic Decimals
Decimal Point

Basic Number
 -146 8 14 -68
 -200 -54 22
 -29 -34 -78 -97
 31 150 -45 -3

Factors and
Multiples

Rounding
 $\times 30$ to the nearest ten
 $25 \leq x < 35$

Scale Drawings
And Bearings

Basic Fractions
 $\frac{5}{3} \div \frac{2}{9}$
 $\frac{5}{3} \times \frac{9}{2} = \frac{45}{6} = \frac{15}{2}$

Basic Percentages
73% of 680



YEAR 9

Proportion

Operations with Fractions

Averages
6 is the Median

Finding percentages
and fractions

Properties of shape



Equations
 $x + 3 = 8$
 $x + 3 - 3 = 8 - 3$
 $x = 5$

Estimation
Rounding and Estimation

Calculating Space

Transformations
Rotation

Calculating Space

Measuring Space

Fraction Decimal Percentages

Angles
 $x \times \div$ by powers of 10
 $5833 \div 1000$

Sequences
1 3 6 10 ...

Factors and
Multiples

Negative Numbers
 $5 \times 4 = 20$
multiple of 5
multiple of 4

Visualizing and
Constructing

Shape
octagon

Calculating Space

Data Review

Number Review

Geometry Review

Angles

Multiplication & Division
 $735 - 231 =$

Algebra
Collect like terms
 $4a + 5 + 2a - 3$
 $= 6a + 2$

Sequences
1 3 6 10 ...

Factors and
Multiples

Estimation
ESTIMATING

Angles

Fractions Decimals and Percentages
 $\frac{1}{2} = 0.5 = 50\%$

Metric Units
g kg ml cl l

Multiplication & Division

Sequences
19, 15, 11, 7 ...

The Number System

Angles
Right angle

Y6 SATS

Year 6 SATS

Negative Numbers

Time

Fractions

Data

Addition & Subtraction

Transformations
Reflection Symmetry

Angles
Right angle

Y6 SATS

Year 6 SATS