



Learning Journey

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



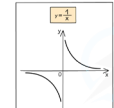
YEAR 12+



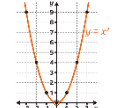
Written Exam 3 Papers

Exam Questions and Techniques

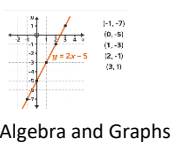
Algebra Review



Sketching Graphs



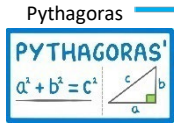
Quadratic Graphs



Algebra and Graphs

$$2x - 3 = -7$$

Geometry and Measures Revision

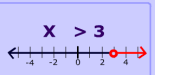


Pythagoras
 $a^2 + b^2 = c^2$

Number Revision

The powers of 2:
 $2^1 = 2$
 $2^2 = 4$
 $2^3 = 8$
 $2^4 = 16$
 $2^5 = 32$
 $2^6 = 64$
 $2^7 = 128$
 $2^8 = 256$
 $2^9 = 512$
 $2^{10} = 1024$

Inequalities



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

YEAR 11

YEAR 10

YEAR 9

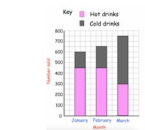
YEAR 8

YEAR 7

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

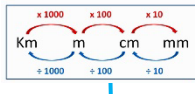
Algebra Recap and Extension

Collecting and Representing Data



Statistical Measures

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



Measures

Constructions and Loci

Ratio and Proportion Review

RATIOS compare VALUES
PROPORTIONS compare RATIOS

Properties of Polygons

Volume

2D Representations of 3D shapes

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

Scatter graphs

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

List of Indices Laws

Indices

Calculating with Percentages

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

Basic Probability

Basic Number

Factors and Multiples

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

Scale Drawings and Bearings

Basic Fractions

Basic Percentages
73% of 680



Equations
 $2x - 3 = -7$

Proportion

Operations with Fractions

averages

Finding percentages and fractions

Properties of shape

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

Estimation

Transformations

Calculating Space

Measuring Space

Fraction Decimal Percentages

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

Factors and Multiples

Shape

Calculating Space

Data Review

Addition & Subtraction
 $735 - 231 =$

2D and 3D

Angles

Sequences
1 3 6 10 ...

Negative Numbers

Visualizing and Constructing

Angles

Number Review

Geometry Review

Multiplication & Division
 $23 \times 12 =$

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

data

Negative Numbers
 $-6 -5 -4 -3 -2 -1 0 1 2$

Estimation

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

Metric Units
 $g \text{ kg } ml \text{ cl } l$

Multiplication & Division

Sequences
19, 15, 11, 7 ...

The Number System

YEAR 7

Negative Numbers

Time

Fractions

Data

Addition & Subtraction

Transformations
Reflection Symmetry

Angles
Right angle

Y6 SATS
Year 6 SATS

