

Year 11: Precision Revision



 **Sparx Learning**



Maths Genie



Hannah Kettle Maths





Using QLA effectively.
(Question Level Analysis)



[Sparx Maths - Home](#)



Questions	Topic	Score	Sparx Code
1	Converting between fractions, decimals and percentages	1 / 1	U888
2	Special sequences	0 / 1	U680
3	Converting units of length, mass and capacity	1 / 1	U388
4	Finding the lowest common multiple (LCM)	1 / 1	U751
5	Adding and subtracting integers	1 / 1	U417
6	Multiplying and dividing with place value, Adding and subtracting integers	3 / 3	U735, U417
7a	Estimating and measuring	1 / 1	U102
7b	Understanding, measuring and drawing angles	1 / 1	U447
7c	Understanding, measuring and drawing angles	1 / 1	U447
8a	Reading and plotting coordinates	1 / 1	U789
8b	Reading and plotting coordinates	1 / 1	U789
8c	Calculating midpoints	1 / 1	U933
9a	Drawing bar charts	3 / 3	U363
9b	Interpreting bar charts	2 / 2	U557
9c	Converting between ratios, fractions and percentages	1 / 1	U176
9d	Writing and simplifying ratios	1 / 1	U687
10a	Reflection	2 / 2	U799
10b	Plotting horizontal, vertical and diagonal lines	1 / 1	M797
11a	Interpreting frequency tables and two-way tables	3 / 3	U981
11b	Interpreting frequency tables and two-way tables	2 / 2	U981
12	Using the correct order of operations	0 / 1	U976
13a	Function machines with numbers	2 / 2	M175
13b	Function machines with numbers	2 / 2	M175
14a	Finding the volume of cubes and cuboids	0 / 2	U786
14b	Finding the surface area of cubes and cuboids	2 / 3	U929
15a	Factorising into one bracket	0 / 1	U365
15b	Solving equations with two or more steps	3 / 3	U325
16	Constructing and solving linear simultaneous equations	0 / 5	U137
17	Sharing amounts in a given ratio	2 / 3	U577
18*	Using a written method to divide with decimals	1 / 3	U868
19a*	Mutually exclusive events, Expected results from repeated experiments	1 / 3	U683, U166
19b*	Expected results from repeated experiments	0 / 1	U166
20a*	Adding and subtracting mixed numbers	2 / 2	U793
20b*	Dividing with mixed numbers	1 / 3	U538
21*	Angles on parallel lines, Angles in triangles	0 / 3	U826, U628
22a*	Estimating calculations, Calculating with speed	1 / 3	U225, U151
22b*	Estimating calculations	1 / 1	U225
23*	Angles in polygons, Constructing and solving quadratic equations	0 / 4	U427, U150
24*	Using and finding equations of linear real-life graphs	0 / 1	U862
25	Changing the subjects of formulae with two or more steps	0 / 2	U181
26	Factorising to solve quadratic equations of the form $x^2+bx+c=0$	0 / 3	U228
		/	



M4TH5

ULTIMATE FOUNDATION CHALLENGE

Year 11

Name
Class



GCSE (Edexcel) Revision |
1st Class Maths



1st
**1 QUESTION ON
EVERY TOPIC
GCSE HIGHER**

Video Solutions



SCAN ME

1	Expand/Factorise	27	Frequency Polygons
2	Prime Factorisation	28	Venn Diagrams
3	Percentage Change/Profit	29	Standard Form (Conversion/Calculation)
4	Mixed Number Operations	30	Best Buys + Exchange Rate
5	Changing the Subject	31	Plans and Elevations + Volume of Prism
6	Inequalities	32	Simultaneous Equations
7	Reciprocals + Error Intervals	33	Surface Area of Pyramid
8	Averages from Tables	34	Distance-Time Graphs
9	Using a Calculator	35	Angles in Regular Polygons
10	Angle Bisectors	36	Compound Interest
11	Straight Line Graphs	37	Trigonometry (SOHCAHTOA)
12	Estimation	38	Trigonometry (SOHCAHTOA)
13	Area/Circumference of Circles	39	Probability In Tables
14	Diagram Sequences	40	More Angles in Regular Polygons
15	Reverse Percentages	41	Drawing Quadratic Graphs
16	Index Laws	42	Loci + Perpendicular Bisectors
17	Quadratics (Expand, Factorise, Solve)	43	HCF/LCM
18	Inverse Proportion	44	Volume of Cone/Sphere
19	Speed, Distance, Time	45	Similar Triangles + Angles in Parallel Lines
20	Scatter Diagrams	46	Finding Equation of a Straight Line
21	Transformations	47	Forming and Solve Equation + Area of Trapezium
22	Pythagoras	48	Probability Tree Diagrams
23	Interpreting Pie Charts	49	Midpoints + Congruent Shapes
24	Column Vectors	50	Features of Quadratic Graphs
25	Recipes	51	Direct/Inverse Proportion
26	Standard Form (Ordering)		

52	Types of Graphs	78	Completing the Square
53	Density, Mass, Volume	79	Conditional Probability
54	Pressure, Force, Area	80	Sector Area + Area of a Triangle (Trig)
55	Equations of Parallel Lines	81	Exact Trig Values + Surds and Brackets
56	Fibonacci Sequences + Simultaneous Equations	82	Proportionality
57	Angles in Irregular Polygons	83	Equations of Perpendicular Lines
58	Pythagoras + Arc Length	84	Iteration
59	Stem and Leaf Diagrams + Box Plots + Comparing Distributions	85	Interpreting Histograms
60	Surface Area of Spheres/Cones	86	Cosine Rule (Side) + Sine Rule (Side)
61	Expand Triple Brackets	87	3D Trigonometry + Pythagoras
62	More Index Laws	88	Bounds
63	Negative Scale Factor Enlargements	89	Algebraic Proof
64	Inequality Regions	90	Solving Quadratic Inequalities
65	Capture Re-capture	91	Similar Areas/Volumes
66	Estimating Powers and Roots	92	Cosine Rule (Angle)
67	Product Rule for Counting	93	Circle Theorems
68	Graphs of Trigonometric Functions	94	Invariant Points
69	Cumulative Frequency	95	Equations with Algebraic Fractions
70	Geometric Sequences + Surds	96	Bearings + Sine Rule (Angle)
71	Exponential Graphs	97	Velocity Time Graphs
72	Equation of Circle + Solving Simultaneous Equations Graphically	98	Surds (Rationalise Denominator)
73	Quadratic Formula	99	Completing the Square (Harder)
74	Quadratic n^{th} term	100	Simplifying Algebraic Fractions
75	Functions	101	Non-Linear Simultaneous Equations
76	Drawing Histograms	102	Transformations of Graphs
77	Recurring Decimals to Fractions	103	Equation of Tangent to a Circle
		104	Geometric Proof
		105	General Iterative Processes
		106	Vectors

Essential Easter work:

[Maths Genie • Edexcel GCSE Maths Past Papers, Mark Schemes, Model Answers and Video Solutions](#)



M4TH5

ESSENTIAL

EASTER WORK

Year 11

FOUNDATION PAPERS

Name

Class.....

FULL
WRITTEN
SOLUTIONS:





Half Past Papers — Hannah Kettle Maths



Search



- (a) Work out the value of T .
Give your answer in standard form correct to 3 significant figures.

$$\sqrt{\frac{5.6 \times 10^{-5}}{(1.4 \times 10^{-4})^3}} = 4517.539515$$

$$= 4.520$$

$$T = 4.52 \times 10^3 \quad (2)$$

w is increased by 10%
 d is increased by 5%

Lottie says,

"The value of T will increase because both w and d are increased."

- (b) Lottie is wrong.
Explain why.

Write your name here

Surname Other names

Pearson Edexcel
Level 1/Level 2 GCSE (9-1)

Mathematics
FOR FULL VIDEO SOLUTIONS
SCAN THE QR CODE
[youtube.com/c/hannahkettlemaths](https://www.youtube.com/c/hannahkettlemaths)

Higher Tier

Half Past Paper – Week 5

Total Marks

Q	Topic	Marks	Sparx Code
1a	Interpreting scatter graphs	1	U277
1b	Interpreting scatter graphs	1	U277
1c	Interpreting scatter graph, Presenting data and making conclusions	1	U277,U571
3	Finding the area of trapeziums, Finding the area of triangles	2	U265,U945
5a	Finding unknown angles in right-angled triangles	2	U545
5b	Finding unknown angles in right-angled triangles	1	U545
7	Solving equations with the variable on both sides	3	U870
9a	Standard form with a calculator	2	U161
9b	Percentage change with a calculator	2	U671
11	Finding original values in percentage calculations	3	U286
13	Finding the surface area and volume of similar shapes	3	U110
15a	Estimating areas under non-linear graphs	3	U882
15b	Estimating areas under non-linear graphs	1	U882
17	The sine rule, The cosine rule	5	U952,U591
19	Understanding sin, cos and tan, Solving quadratic equations	5	U605,U960,U665
21a	Geometric proofs with congruence and similarity	3	U887
21b	Geometric proofs with congruence and similarity	2	U887
Total		40	

ESSENTIAL equipment

