Never Stop Flying

MATHS

Achieving Excellence through a Values Driven Education

Examinations

Mathematics

Paper 1	Paper 2	Paper 3
Non Calculator	Calculator	Calculator
1 hr 30 minutes	1 hr 30 minutes	1 hr 30 minutes
80 marks	80 marks	80 marks

Exam Board: Edexcel

Foundation: Grades 1 to 5

Higher: Grades 3 to 9

Aim High

Y11 Course Structure

Mathematics

Number

Algebra 1

Geometry

Statistics

Ratio

Geometry 2

Algebra 2

Algebra 3

Statistics 2_____

Revision (Easter)

REVISE PEARSON EDEXCEL GCSE (9–1)

Mathematics

REVISION NOTEBOOK

Higher

SCAN ORGANISE REVISE

P Pearson

REVISE PEARSON EDEXCEL GCSE (9–1)

Mathematics

REVISION NOTEBOOK

Foundation

SCAN ORGANISE REVISE

P Pearson
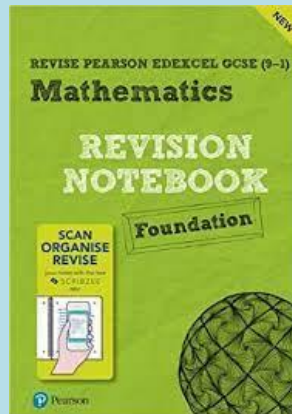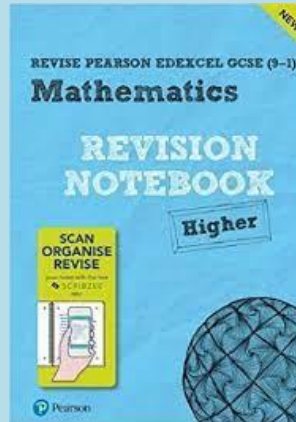
Expand and Simplify

$$x - (x + 4)(x - 1)$$

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Sparx U1179, U768 U606

dfm K179g

Expand and Simplify

$$x^2 - (2x - 1)^2$$

Be Determined

Mathematics

Home Learning through Sparx

sparx

Past Examination Questions
Video instruction / support
Key Skills

Additional home learning book. Students must show working.
Each homework will be made up of topics previously taught with
Sparx also pulling through topics for students to consolidate

Be Determined

Mathematics

Assessment each half term – GCSE Paper/Questions

GCSE HIGHER REVISION LIST

Topic	Blue Book	Link to DrFrost Exam Questions	Sparx	🙂	😐	🙁
HCF & LCM using prime factors	1	Factors and primes	U250			
Indices 1 (Multiplying, dividing, power)	2	Indices 1	U235			
Indices 2 (Fractional and negative)	3	Indices 2	U772,U985			
Standard Form - Writing and Calculations	8	Standard form	U161,U264,U290			
Recurring decimals to fractions	9	Recurring decimals	U689			
Simplifying Surds	12	Surds 1a	U338,U633,U872			
Expanding brackets with surds	49	Surds 2a	U499			
Surds - Rationalising the denominator	49	Surds 2b	U707,U281			
Error Intervals	11	Accuracy and error	U301,U587,U657			
Upper & Lower Bounds	10	Upper and lower bounds	U657			
Limits of Accuracy	11	Accuracy and error	U587			
Counting Strategies		Counting strategies	U369			
Expand two or more brackets	17	Expanding brackets	U179, U768, U606			
Solving Linear Equations	19	Linear equations 1	U755, U870			
Applications of Linear Equations	20	Linear equations 2	U525, U505			
Changing the Subject	46	Rearranging formulae	U556			
Factorise & Solve Quadratics	31	Quadratic equations	U228			

sparx

Solving single inequalities	Prime factor decomposition	Sharing amounts in a given	Using standard form with n	Using standard form with p	Multiplying and dividing nur	Angles in polygons	Plotting graphs of quadratic	Plotting graphs of quadratic	Solving quadratic equations	Volume of cuboids, Calcula	Finding averages from grou	Finding the surface area of	Drawing cumulative frequer	Drawing cumulative frequer	Interpreting cumulative freq	Interpreting cumulative freq	Calculating with ratios and	Converting recurring decima
1.6	1.9	4.7	1	0.9	1.5	2.6	1.8	1.8	1.5	2.7	2	2.4	0.9	1.3	0.4	0.8	2	2.6
2	2	5	1	1	2	3	2	2	2	3	3	3	1	2	1	2	3	3
1	2	3	4a	4b	4c	5	6a	6b	6c	7	8	9	10a	10b	10c	10d	11	12
▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
2	2	4	1	1	2	3	2	2	0	3	3	2	1	1	1	0	0	3
1	2	5	0	1	0	2	1	1	0	3	3	2	1	1	1	0	0	3
2	2	5	1	1	2	3	2	1	2	3	3	2	1	0	0	0	3	3
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2	2	5	1	1	2	3	2	1	0	3	1	2	1	1	0	0	0	3
2	2	3	1	0	0	1	2	1	0	1	0	1	1	1	1	0	0	1

Y11 Review Lesson

Mathematics

Q	Question	Answer	
1	Calculate $2.08 \times 0.32 =$		48
2	Give a possible pair of two prime numbers that sum to a square number less than 30		28/99
3	Write 2.08×10^4 as an ordinary number		123
4	Evaluate $100^{-\frac{1}{2}}$		104/108
5	Calculate $\sqrt[3]{1\frac{1}{4} + 3 - \frac{7}{8}}$ leave your answer as a mixed number		66/150
6	A solid metal sphere has radius $9.8cm$. The metal has a density of $5.023\ g/cm^3$. Find an estimate for the mass of the sphere, giving your answer in kilograms. (Volume of a sphere $= \frac{4}{3}\pi r^3$)		131
7	Calculate $\frac{(5 \times 10^3) \times (6 \times 10^8)}{2 \times 10^6}$		125/126
8	Write $0.2\dot{7}$ as a fraction in its simplest form		53
9	Simplify $\sqrt{300} - \sqrt{48}$		115
10	2400 has been rounded to 2 significant figures. Write out the error interval		775
11	Find the HCF and LCM of 1960 and 8575		32/35
12	Expand and simplify $(x - 6)^2$		163
13	Calculate $5\frac{3}{8} - 2\frac{1}{3} \div 3\frac{2}{3}$, leave your answer as a mixed number		150
14	Factorise fully $12m^7n^3 - 20m^4n^5$		169
15	Simplify fully $\frac{3x^3y^2 \times 4xy^5}{18xy^7}$		174
16	Find the perimeter of the sector of the circle, with radius 8cm and interior angle 150°		545
17	Solve $10 - 3e = 2e + 20$		184
18	P is inversely proportional to the square T. When $P = 10$, $T = 5$. Find the value of P when $T = 10$		346
19	Solve $\frac{3x+4}{8} + \frac{4x-1}{4} = 3$		187
20	Rearrange $9f^2 + 2j = k$ to make f the subject of the formula		284
21	The probability of spinning a biased spinner is given the table below		352/353
22	Factorise fully $x^2 - 10x + 24$		544
23	Point A has coordinates $(-3, -1)$ and point B has coordinates $(0,8)$. Find the length AB.		501
24	The average age of staff in the maths department is 42. There are 7 members of staff		407/408

Question 21 table:

Number	1	2	3	4
Probability	$2x$	0.3	$3x - 0.2$	x

What is the probability of the spinner landing on a 1

- **Mini Assessment occurring every 2 weeks**
- **Mixture of recently taught material plus key GCSE skills**
- **3 Test format - Test A/B/C asks the same questions but different numbers.**
- **Students need to be aiming to improve each test**
- **Sparx Maths clip numbers for practise / Support**
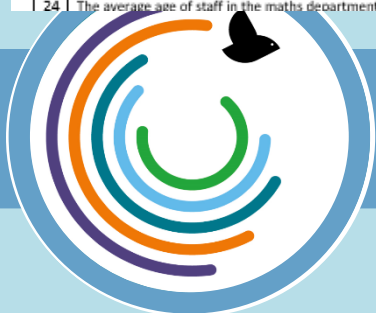
Be Supportive

sparx

Mathematics

Video support and questions on every maths topic

Students can complete independent learning on Sparx to practice GCSE topics

Aim High

Mathematics

Started Wed 20th September

- **Every Wednesday (3-4pm) – Maths Department**
- **Guided Exam Paper practice. (Different paper each week)**
- **Walking Talking Mocks in the 4-week run-up to trials**
- **Mark schemes and predicted grade boundaries available through Teams**

Be Proud