

GCSE Mathematics Information



Exam Information



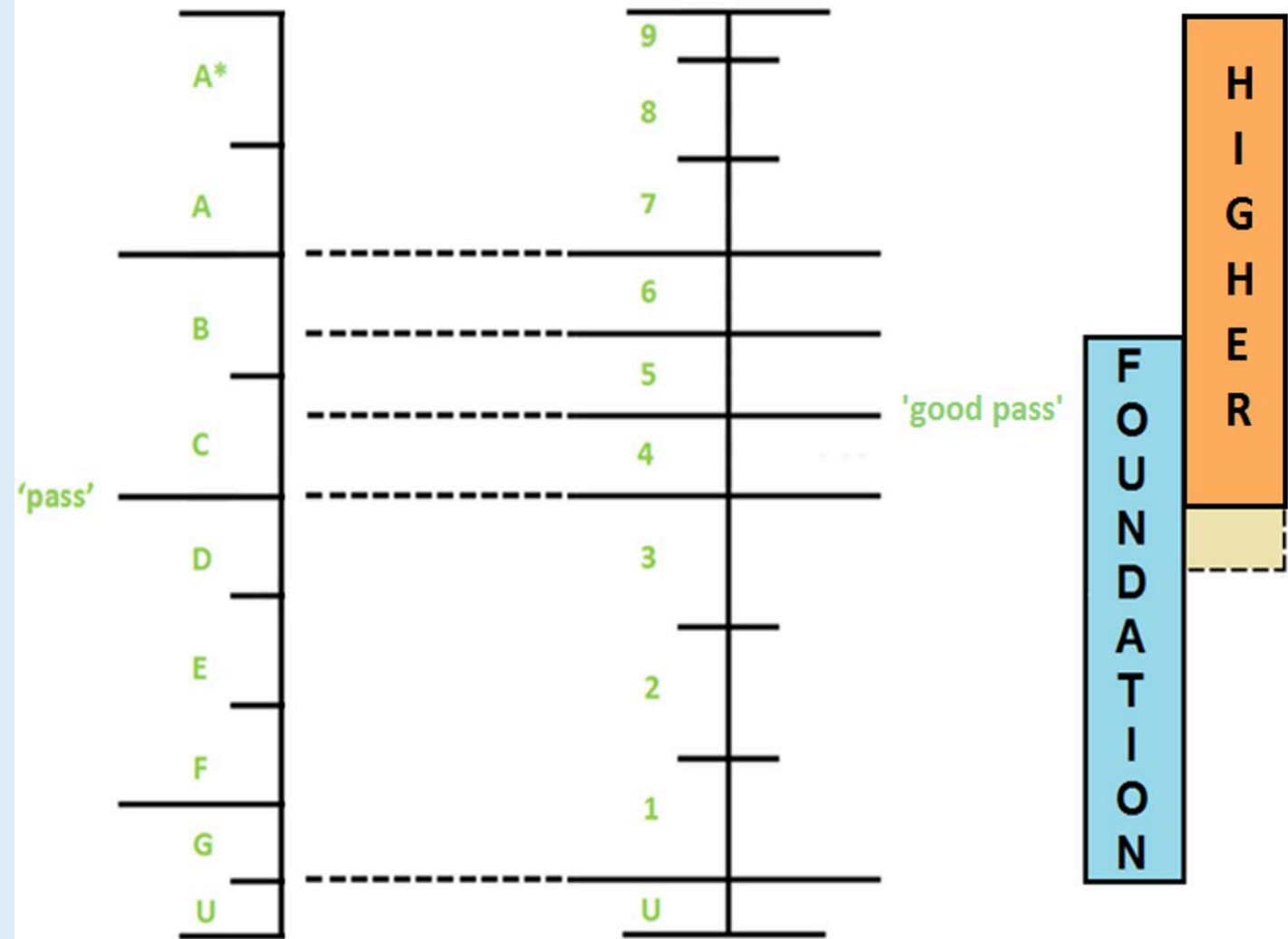
- We use the exam board Edexcel (Pearson).
- The exam consists of three papers.
- Each paper is 1 hour 30 minutes long and out of 80 marks.
- The scores for all three are added together for a total of 240 marks, then the pupils are given a grade based on this score.
- Paper 1 is non-calculator exam. Papers 2 and 3 are calculator exams.



Pearson
Edexcel

Exam Information

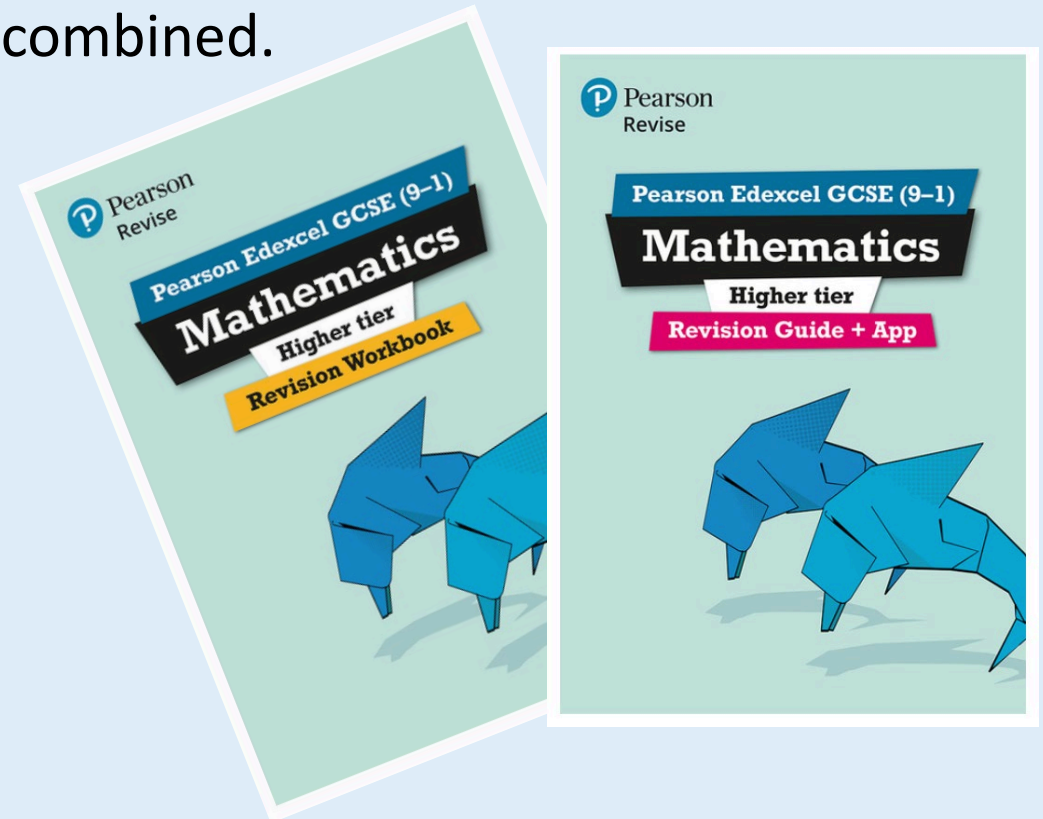
- There are two tiers of entry: Higher and Foundation.
- Sets 1-3 will be entered into Higher and sets 4-8 will be entered into Foundation.



How to Revise



- Best form of revision is exam practice. Do as many test paper as you can! You will get at least one test paper/part of a test paper per week to complete for homework. We consider this to be the minimum required, excelling students will do more per week.
- Revision guides and workbooks are available from the school. £5.99 each from Pearson, school are selling them for £5 for the two books combined.



We also offer a revision lesson every Thursday after school from 3:15 to 4:15 with your class teacher.

Using Your Mocks



- After every pupil in Year 11 has done their Mocks (we will do two – one in November and one in March) they will be provided with a QLA (question level analysis).
- A QLA informs a pupil how they scored on each question on their test. Giving them either a colour:
 - **Green** - correct or scored nearly all marks
 - **Amber** - scored some of the marks.
 - **Red** - didn't score many or no marks at all.

Q	Topic	Max	Actual	RAG
1	Numbers in size order	1	1	100%
2	Factors	1	1	100%
3	Rounding	1	1	100%
4	Fraction to decimals	1	1	100%
5	Place value	1	1	100%
6a	Probability scale	1	1	100%
6b	Probability scale	1	1	100%
7	Pictograms	4	4	100%
8	Coordinates	3	3	100%
9a	Ratio to fractions	1	1	100%
9b	Ratio 1:n	2	0	0%
10	Fraction of an amount	4	1	25%
11	Reflections	2	2	100%
12a	Function machines	1	1	100%
12b	Function machines	2	0	0%
13a	Bearings	1	0	0%
13b	Scale drawings	3	0	0%
14	Two way tables	3	3	100%
15	Proportional reasoning	3	1	33%
16a	Median from a table	1	0	0%
16b	Frequency from a table	1	1	100%
17	Fractions & percentages	5	1	20%
18	Estimation	3	0	0%
19a	Expanding single brackets	1	0	0%
19b	Factorising expressions	1	0	0%
19c	Solving linear equations	2	0	0%
20	Sequences nth term	2	0	0%
21	Fractions multiplication	3	2	67%
22	Quadratic, cubic & reciprocal graphs	2	2	100%
23	Congruence	1	0	0%
24	Profit	3	1	33%
25	Angle facts	5	0	0%
26	Stem and leaf diagrams	3	0	0%
27	Pressure / Force / Area	3	0	0%
28	Standard form	2	2	100%
29	Ratio	3	1	33%
30a	Rearranging equations	2	0	0%
30b	Index laws	1	0	0%
Total Marks		80	33	41%

Q	Topic	Max	Actual	RAG
1	Decimals to fractions	1	1	100%
2	Rounding	1	1	100%
3	Simplifying expressions	1	1	100%
4	Fractions to percentages	1	1	100%
5	Cube numbers	1	1	100%
6	Time	3	2	67%
7	Bar Charts	2	2	100%
8a	Angle facts	2	1	50%
8b	Angle facts	1	0	0%
9	Reading scales / Substitution	4	4	100%
10a	Solving linear equations	1	0	0%
10b	Solving linear equations	1	1	100%
11	Volume	3	3	100%
12	Combinations	2	1	50%
13	Four operations	3	1	33%
14	Pie Charts	3	0	0%
15a	Substitution	2	0	0%
15b	Substitution	2	0	0%
16	Fraction of an amount / %ages	4	4	100%
17a	Proportion - Recipes	3	3	100%
17b	Ratio - Simplifying	2	2	100%
18	Rotations	2	0	0%
19	Fractions	2	0	0%
20	Ratio	4	0	0%
21a	Product of prime factors	2	0	0%
21b	LCM	2	2	100%
22a	Venn Diagrams	3	1	33%
22b	Venn Diagrams	2	1	50%
23	Ratio / Percentages	5	0	0%
24a	Cubic graphs	2	2	100%
24b	Cubic graphs	2	1	50%
25	Trigonometry	2	0	0%
26	Vectors	2	0	0%
27	Pythagoras / Circles	4	0	0%
28	Exterior angles	1	0	0%
29	$y = mx + c$	1	0	0%
Total Marks		80	36	45%

Q	Topic	Max	Actual	RAG
1	Metric conversions	1	1	100%
2	Fraction of an amount	1	1	100%
3	Percentages to fractions	1	1	100%
4	Powers	1	1	100%
5	Negatives	1	1	100%
6a	Bar Charts	1	1	100%
6b	Bar Charts	1	1	100%
7	Fraction of a shape	2	2	100%
8	Money problem	3	3	100%
9a	Order of operations	1	1	100%
9b	Order of operations	1	1	100%
9c	Reciprocals	1	0	0%
10a	Reading graphs	1	1	100%
10b	Reading graphs	1	1	100%
10c	Reading graphs	1	0	0%
11	Angle facts	3	0	0%
12a	Sequences	2	1	50%
12b	Sequences	1	0	0%
13	Perimeter	2	0	0%
14a	Simplifying expressions	2	2	100%
14b	Solving linear equations	2	0	0%
15	Best Value	5	5	100%
16a	Probability	2	2	100%
16b	Probability	1	1	100%
17	Constructions	2	0	0%
18	Conversion graphs	3	0	0%
19a	Percentages	2	2	100%
19b	Percentages	2	0	0%
20	Mean	4	4	100%
21a	Relative frequency	1	1	100%
21b	Probability	1	1	100%
22	Plans and elevations	2	1	50%
23a	Index laws	1	1	100%
23b	Index laws	2	2	100%
23c	Solving linear equations	2	0	0%
24	Speed / Distance / Time	3	3	100%
25	Error intervals	2	0	0%
26	Area in context	5	1	20%
27a	Probability tree diagrams	2	2	100%
27b	Probability tree diagrams	2	0	0%
28a	Simultaneous equations	1	0	0%
28b	Quadratic graphs	2	0	0%
29	Density / Mass / Volume	3	0	0%
Total Marks		80	45	56%

	0% and	40%
	41% and	60%
	61% and	100%

Using the QLA

PAPER 1				
Q	Topic	Max	Actual	RAG
1	Sequences nth term	2	2	100%
2	Fractions multiplication	3	3	100%
3	Quadratic, cubic & reciprocal graphs	2	2	100%
4	Congruence	1	1	100%
5	Profit	3	0	0%
6	Angle facts	5	4	80%
7	Stem and leaf diagrams	3	3	100%
8	Pressure / Force / Area	3	3	100%
9	Standard form	2	1	50%
10	Ratio	3	3	100%
11a	Powers and roots	2	2	100%
11b	Negative / fractional indices	2	2	100%
11c	Indices	2	2	100%
12a	Cumulative frequency	1	1	100%
12b	Cumulative frequency	2	2	100%
12c	Cumulative frequency	3	0	0%
13	Density / Mass / Volume	3	3	100%
14	Conditional probability	3	3	100%
15	Perpendicular lines	3	3	100%
16	Capture - recapture	4	4	100%
17	Rearranging equations	4	4	100%
18	Direct proportion	3	1	33%
19a	Functions	1	1	100%
19b	Composite functions	2	2	100%
19c	Inverse functions	2	2	100%
20	Surds	4	1	25%
21	Vectors	4	0	0%
22	Area of sectors / circles	5	0	0%
23	Ratio	3	0	0%
Total Marks		80	55	69%

PAPER 2				
Q	Topic	Max	Actual	RAG
1a	Product of prime factors	2	2	100%
1b	LCM	2	2	100%
2a	Venn Diagrams	3	3	100%
2b	Venn Diagrams	2	2	100%
3	Ratio / Percentages	5	5	100%
4a	Cubic graphs	2	2	100%
4b	Cubic graphs	2	2	100%
5	Trigonometry	2	2	100%
6	Vectors	2	2	100%
7	Pythagoras / Circles	4	4	100%
8a	Reverse percentages	2	2	100%
8b	Compound interest	3	3	100%
9	Box Plots	2	2	100%
10a	Index laws	1	1	100%
10b	Simplifying expressions	1	1	100%
10c	Index laws	2	2	100%
11	Product rule	2	2	100%
12a	Gradient of a line	2	1	50%
12b	Gradient of a line	1	0	0%
13	Sine Rule	3	3	100%
14	Proportional Reasoning	4	0	0%
15	Combination of transformations	2	2	100%
16	Quadratic sequences	3	1	33%
17	Turning points	1	1	100%
18	Cones and spheres	4	1	25%
19	Iteration	4	0	0%
20a	Conditional probability	3	3	100%
20b	Conditional probability	5	3	60%
21a	Transforming functions	2	0	0%
21b	Transforming functions	2	0	0%
22	Equation of a circle / Tangents	5	0	0%
Total Marks		80	54	68%

PAPER 3				
Q	Topic	Max	Actual	RAG
1a	Index laws	1	1	100%
1b	Index laws	2	2	100%
1c	Solving linear equations	2	2	100%
2	Speed / Distance / Time	3	2	67%
3	Error intervals	2	2	100%
4	Area in context	5	5	100%
5a	Probability tree diagrams	2	2	100%
5b	Probability tree diagrams	2	2	100%
6a	Simultaneous equations	1	1	100%
6b	Quadratic graphs	2	2	100%
7	Reverse mean	3	3	100%
8	Relative frequency	3	3	100%
9	Volume	5	2	40%
10a	Estimation	2	2	100%
10b	Mean	2	2	100%
11a	Combined transformations	3	2	67%
11b	Invariance	1	0	0%
12a	Algebraic fractions	3	3	100%
12b	Triple brackets	3	3	100%
13a	Inequalities and regions	4	4	100%
13b	Inequalities and regions	1	1	100%
14	Circle theorems	4	3	75%
15	Recurring decimals	2	2	100%
16a	Area under a curve	2	0	0%
16b	Area under a curve	1	0	0%
16c	Acceleration	1	0	0%
17	Mean from a histogram	4	4	100%
18	3D pythagoras / bounds	4	0	0%
19	Similarity	4	0	0%
20	LCM	1	0	0%
21a	Ratio	2	1	50%
21b	Ratio / Quadratics	3	0	0%
Total Marks		80	56	70%



	0%	and	40%
	41%	and	60%
	61%	and	100%

- The QLA tells pupils the topics that they were good at and the topics which they need to improve on.
- Pupils should use this as their guide when choosing topics to revise. Start with red topics, then move onto amber.

Useful Websites



There are plenty of websites you can use to revise. Pupils should firstly use their QLA to identify topics that they need to revise then use either their revision books or one of the following websites:

- Maths Genie - useful for videos explaining topics and questions to practice. Has lots of past papers and predicted papers.
- Just Maths – questions and exam papers with solutions. Need a login:
Login: Derbystudent
Password: Derby
- Youtube – Hegarty Maths videos are good.
- Corbett Maths- useful for videos explaining topics and questions to practice. Has lots of fluency questions.

Mathsgenie.co.uk

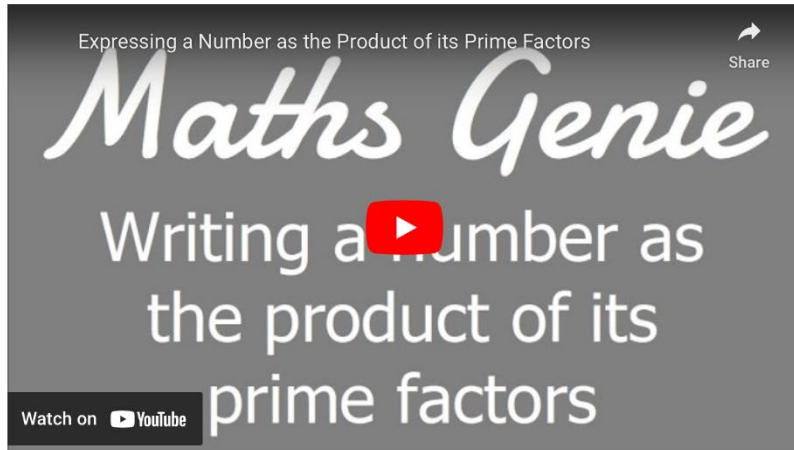
When you visit www.mathsgenie.co.uk you will first see this as their home page.

If you have identified topics from your QLA to revise then click on GCSE revision where you can find some useful materials.

The screenshot shows the homepage of Mathsgenie.co.uk. At the top is a dark navigation bar with the logo 'Maths Genie' on the left and several menu items: 'GCSE Revision', 'GCSE Papers', 'A Level Revision', 'A Level Papers', 'KS2 Revision', and 'Resources'. A red arrow points from the 'GCSE Revision' link in the navigation bar to the 'GCSE Revision' section on the main page. Below the navigation bar is a white header with the text 'Welcome to Maths Genie'. The main content area features a large green banner for 'Admin geniuses galore' with the text 'This is how we work now.' and a 'Post a Job For Free' button, with the 'upwork' logo in the bottom right corner. To the right of the banner is a photograph of a man sitting at a desk with a laptop. Below the banner are three grey boxes: 'GCSE Revision' (Video tutorials, practice exam style questions and answers.), 'Edexcel GCSE Papers' (Edexcel GCSE past papers with model solutions and video explanations.), and 'AQA GCSE Papers' (AQA GCSE past papers with model solutions.). To the right of these boxes is a white box with the text 'Maths Genie will always be free.' and a search bar labeled 'Search Maths Genie' with a search icon. At the bottom right is a grey box labeled 'Upcoming GCSE Exams'. A small upward arrow icon is visible in the bottom left corner.

Prime Factor Decomposition, HCF (Highest Common Factor) and LCM (lowest Common Multiple)

[Revision Notes](#)



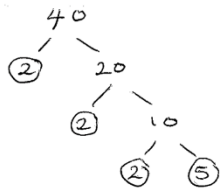
Here you can find topics listed in grade order. Remember: Foundation – Grades 1 to 5 Higher – Grades – all grades but specifically grades 3 to 9

You can either manually search for the topic you're looking for by scrolling or if you press 'Ctrl' and 'f' then you can type your required topic into the search bar

By clicking on the name of the topic you will be taken to a page with explanation videos.

Watch the videos to give yourself a better understanding of the topic.

1 Write 40 as a product of its prime factors.



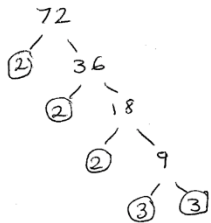
$$2 \times 2 \times 2 \times 5$$

or $2^3 \times 5$

$$2^3 \times 5$$

(Total for question 1 is 2 marks)

2 Write 72 as a product of its prime factors.



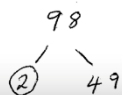
$$2 \times 2 \times 2 \times 3 \times 3$$

or $2^3 \times 3^2$

$$2^3 \times 3^2$$

(Total for question 2 is 2 marks)

3 Write 98 as a product of its prime factors.



$$2 \times 7 \times 7$$

or 2×7^2

If you think you have a good understanding of the topic and would just like to practice exam questions then click here on 'exam questions'

This will take you to this page which has a range of exam questions which can be completed on paper.

By click on the topic name under the exam questions booklet column, you can find the same questions but presented to you like a test paper with space provided for you to complete the questions. This is handy if you have a printer at home.

Once you have answered the questions you can check your answers by clicking on the solutions

This provides you with worked solutions which shows you every step of the working out. This is also very useful if you don't know how to start a question.

Please check the examination details below before entering your candidate information

Candidate surname		Other names	
Centre Number		Candidate Number	
Pearson Edexcel Level 1/Level 2 GCSE (9-1)		Paper reference 1MA1/1F	
Time 1 hour 30 minutes			
Mathematics PAPER 1 (Non-Calculator) Foundation Tier			
You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, Formulae Sheet (enclosed). Tracing paper may be used.		Total Marks	

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided



Once you have been through all of the red and amber topics on your QLA (or if you would just like some exam practice), you can begin to complete some exam papers. You can access these by hovering over the 'GCSE papers'

Make sure you select 'Edexcel Exam papers'

Here you'll find test papers for both higher and foundation.

By clicking on the name of the paper in the 'paper' column

It will open up a PDF of the test paper. This can either be completed on paper or printed out (if you have a printer)

Maths Genie

GCSE Revision GCSE Papers ▾ A Level Revision A Level Papers ▾ KS2 Revision Resources

Edexcel June 2022 Foundation Exam Paper 1

Edexcel GCSE Maths May June 2022 1F Exam Paper Walkthrough

Maths Genie

Edexcel GCSE
May 2022
Paper 1
Foundation Tier

Watch on YouTube

GCSE A Level Other Links

By clicking on the name of the 'play' icon on the 'Answers' column

It will open up an explanation video for each question. You can use the scroll at the bottom to skip to your desired question.

By clicking on the name of the MS icon on the 'Answers' column

It will open up a PDF of the mark scheme. This is useful if you would like to know how the marks are awarded for each question.

By clicking on the name of the ANS icon on the 'Answers' column

It will open up a PDF of the solutions. This is useful if you would like to see the working out for a question in order to help you understand how you might answer a question like this.