



Aspire and Achieve

MATHS GCSE

Revision information

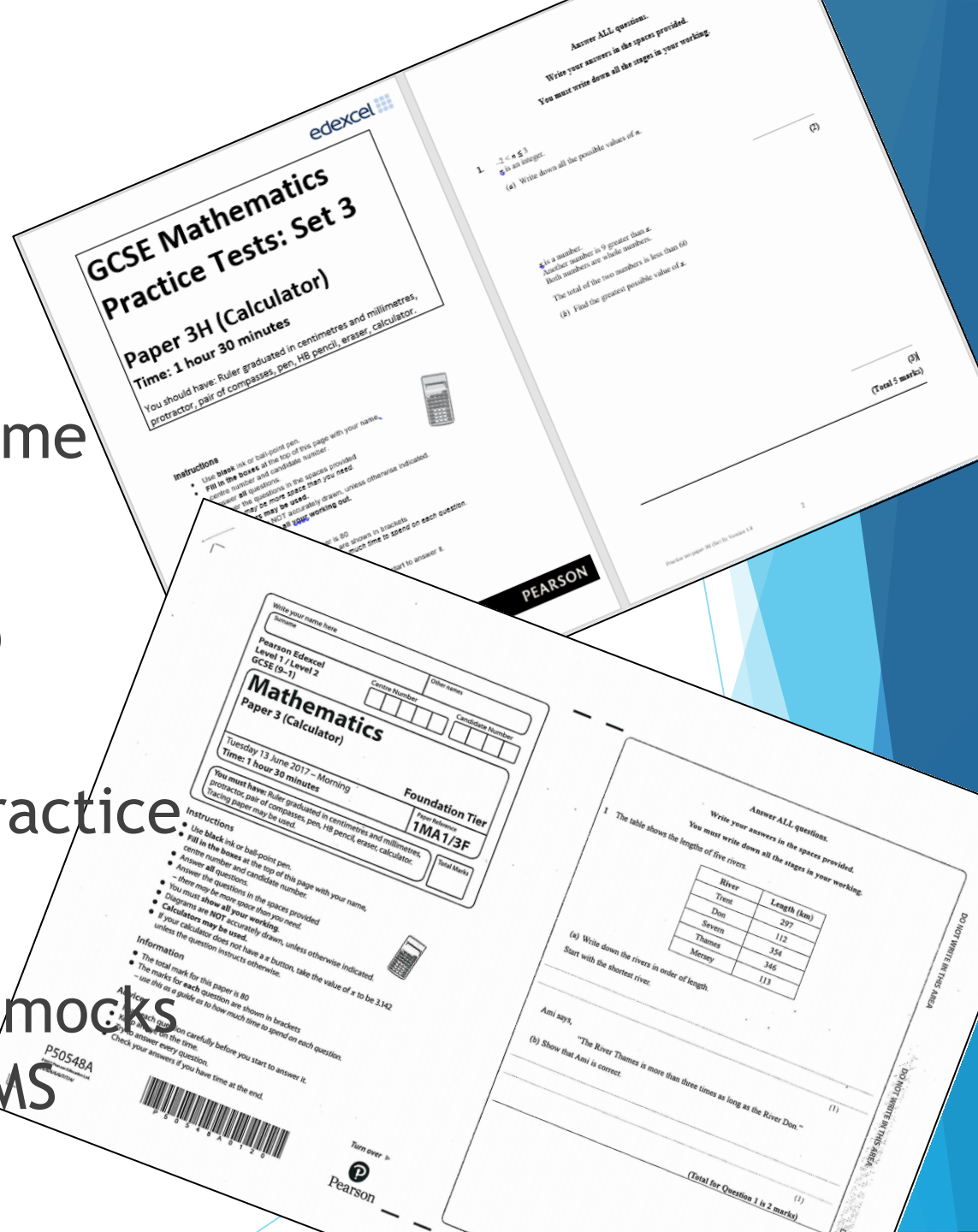


How can you help your child with their Maths revision?

- ❖ Past papers- working through at home
- ❖ MathsWatch
- ❖ Revision guides and Workbooks
- ❖ MyMaths

Past papers

- ❖ Provided weekly
- ❖ In class and for home
- ❖ Marked in class
- ❖ Aiming to build up marks
- ❖ Problem solving practice
- ❖ Exam technique
- ❖ Good practice for mocks and the REAL EXAMS



Marking work regularly

Making corrections

10. The cost of 1.5 kg of peaches is £0.84
The total cost of 3 kg of peaches and 2 kg of apples is £2.34
Work out the cost of 1 kg of apples.

$$1.5 + 1.5 = 3 \text{ kg}$$

$$\pounds 0.84$$

$$\pounds 0.84 \quad \checkmark$$

$$\pounds 1.68$$

||
3 peaches

$$\begin{array}{r} \pounds 2.34 \\ \pounds 1.68 \quad \checkmark \\ \hline \end{array}$$

$$\begin{array}{r} .66 \\ \div 2 \quad .33 \end{array} = 2 \text{ kg apples}$$

$$\pounds 0.33 \quad \checkmark$$

(Total 3 marks)

21. The diagram shows a triangle.

Problem solving techniques

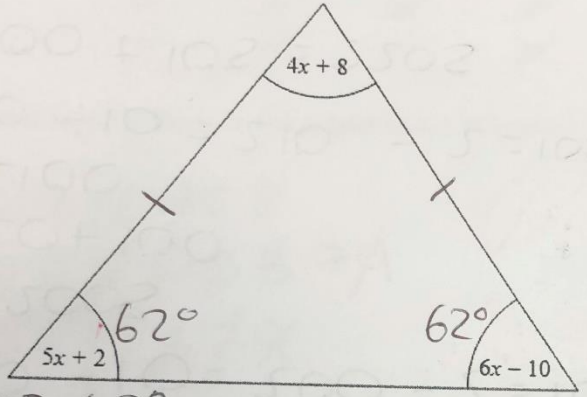


Diagram NOT accurately drawn

$$5 \times 12 + 2 = 62^\circ$$

$$6 \times 12 - 10 = 62^\circ$$

All the angles are measured in degrees.

Show that the triangle is isosceles.

$$180 = 4x + 8 + 5x + 2 + 6x - 10$$

$$180 = 15x$$

$$\frac{180}{15} = x = 12$$

therefore, it's an isosceles triangle because the angles at the bottom are the same

Q	Topic	Mathswatch clip	What I got	Comment
1	Rounding	32, 90	1 / 1	✓
2	FDP	85	1 / 1	✓
3	Metric unit conversion	112	1 / 1	✓
4	Probability scale	14	2 / 2	✓
5	Time	6a	2 / 2	✓
6	Worded problem		0 / 3	revise
7	Time series graph	153	2 / 2	✓
8	Perimeter	52	3 / 3	✓
9	Simplify expressions	7	3 / 3	✓
10	Constructing triangles	47, 147	2 / 2	✓
11	Fractions	24	3 / 3	✓
12	Stem and Leaf	128b	2 / 3	small error
13	Angles in triangles	121	0 / 4	revise
14	Fraction problem	24	2 / 3	revise
15	Rate of flow		2 / 3	revise
16	Frequency tables	57	4 / 4	✓
17	Percentage problem	40	0 / 3	revise
18	Percentage change	108	0 / 2	revise
19	Calculator and significant figures	77,90	3 / 3	✓
20	Inequality on a number line	138	0 / 2	revise
21	Nth term – linear and quadratic	102, 103	1 / 4	revise
22	Frequency polygon and mean from a table	65b	0 / 3	revise
23	Currency conversion	105	0 / 3	revise
24	LCM	80	2 / 3	small error
25	Pressure force area	142	0 / 2	revise
26	Pythagoras and area of a triangle	150, 54	0 / 5	revise
27	Quadratic graphs	98	3 / 4	small error
28	Simplify expressions	34	2 / 4	error
29	Trigonometry	168	0 / 2	revise

Areas I need to focus on:

- 1: Trigonometry
- 2: Pythagoras theorem
- 3: rate of flow

Analysis

- ❖ After key exams (mocks)
- ❖ Highlights area of understanding
- ❖ Highlights areas still needing work
- ❖ Use with revision platforms e.g. MathsWatch and MyMaths

Q	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
Mock 4 paper 3	Inequalities	Non-linear and quadratic	Average from a table and frequency	Currency conversions	LCM	Pressure	Area of a triangle and pythagoras	Drawing cubic graphs	Standard form - calculator	Cumulative frequency	Fractions and percentages	Mean	Probability - tree diagrams	Percentage change	Sine rule and angles in parallel lines	Similar - area and volume	Bounds	Algebraic fractions	Volume - cone and sphere	Quadratic simultaneous	Combined transformations	Trigonometric graphs and	Proof	Total	Grade		
Teacher overview	2	4	3	2	3	2	5	1	1	3	2	0	5	0	0	0	0	1	0	0	0	0	0	0	34	5	
	2	2	1	3	3	2	5	3	2	2	1	3	2	0	0	0	2	1	3	0	0	0	0	0	37	6	
	2	2	2	0	3	1	1	2	2	2	0	0	5	0	0	0	1	0	0	0	0	1	0	0	24	4	
	2	2	3	1	3	0	1	4	2	3	0	0	5	0	0	0	0	0	1	0	0	0	0	0	27	5	
	2	2	3	1	2	2	5	2	0	1	0	3	3	0	0	0	0	0	1	1	0	2	0	0	30	5	
	2	4	3	0	3	0	5	3	2	3	3	3	5	0	3	0	0	0	3	3	0	1	0	0	46	7	
	2	4	2	0	0	0	1	3	2	2	0	0	5	0	0	0	2	2	3	1	0	0	0	0	29	5	
	2	4	3	3	3	1	5	4	1	3	0	3	5	0	0	1	4	0	5	3	0	0	0	0	50	7	
	2	4	1	3	3	0	5	4	2	3	3	3	5	2	0	1	2	0	5	5	1	0	0	0	54	7	
	2	4	2	3	2	2	5	4	2	0	0	0	5	3	1	0	3	0	0	0	1	0	0	0	39	6	
	2	2	3	1	3	2	1	3	2	2	1	0	5	0	0	0	0	1	1	0	0	0	0	0	29	5	
	2	4	1	1	3	2	5	3	1	3	0	0	5	0	0	0	2	1	1	0	0	0	0	0	34	5	
	2	4	3	3	3	2	5	3	2	3	1	3	4	1	0	0	4	0	3	1	1	0	0	0	48	7	
	2	4	3	0	3	0	2	3	1	3	0	0	5	0	0	0	0	0	3	0	0	0	0	0	29	5	
	2	4	2	1	0	0	1	3	2	3	0	0	5	0	0	0	1	1	2	3	0	0	0	0	30	5	
	2	4	3	3	3	2	5	4	2	3	0	3	5	0	5	0	3	0	3	1	0	0	0	0	51	7	
	2	2	3	3	1	0	5	4	2	2	1	0	5	1	2	0	2	1	1	1	0	0	0	0	38	6	
	0	4	1	0	0	2	2	4	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	19	4
	2	2	3	0	2	0	0	4	2	3	3	3	5	0	2	0	0	1	2	0	0	0	0	0	0	34	5
	2	2	3	0	3	2	1	3	2	1	2	3	5	0	0	0	1	0	1	2	0	0	0	0	0	33	5
2	4	2	0	3	0	5	4	2	2	2	0	5	0	5	2	0	1	2	0	0	0	0	0	0	41	6	
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2	3	3	1	3	0	1	4	0	2	2	3	3	0	0	0	1	0	1	0	0	0	0	0	0	29	5	
	1.9	3.2	2.5	1.3	2.5	0.9	3.3	3.3	1.6	2.2	0.8	1.5	4.6	0.3	0.7	0.2	1.2	0.4	1.8	1.1	0.2	0.2	0.0				
	2	4	3	3	3	2	5	4	2	3	3	3	5	3	5	3	4	4	5	5	3	3	3	80			
	96%	80%	82%	42%	82%	46%	67%	83%	81%	74%	27%	50%	92%	10%	14%	5%	31%	10%	37%	22%	5%	5%	1%				
MathsWatch Clip	138	103	130	105	80	142	54	161	83	186	85	62	151	108	201	200	155	210	171	211	182	195	193				

MathsWatch

<https://vle.mathswatch.co.uk/vle>

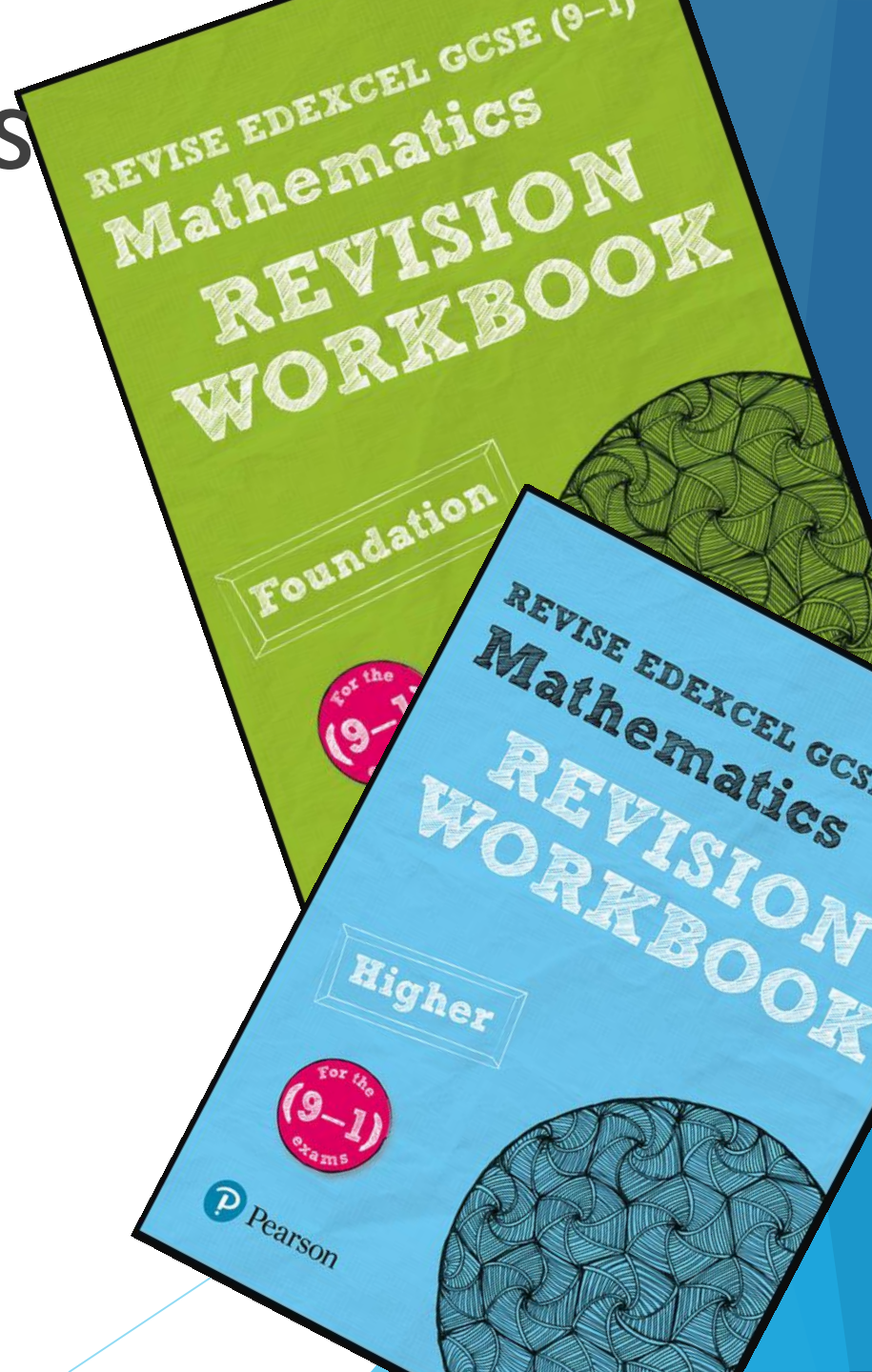
- ❖ Help with papers
- ❖ Revising topics from class
- ❖ Additional practice
- ❖ Revision of topics after papers

The screenshot shows the MathsWatch website interface. At the top, there is a navigation bar with the MathsWatch logo, 'My Work', 'Videos', 'My Progress', 'Extras', and a user profile for 'Molly's account' with a 'Logout' link and '236 days until renewal'. Below the navigation bar, there are tabs for 'Clip 110 Reverse Percentage Problems', 'One Minute Maths', 'Interactive Questions', and 'Worksheet'. The main content area features a video player with a blue background and white text that reads 'Clip 110' and 'REVERSE PERCENTAGE PROBLEMS'. A play button is visible in the bottom left corner of the video player. To the right of the video player is a sidebar with a search filter section titled 'Find a Clip'. This section includes dropdown menus for 'Qualification' (set to GCSE), 'Tier' (set to Higher), 'Grade' (set to All), and 'Topic' (set to All). There is also a search input field containing the text 'percentage'. Below the search filter is a section titled 'Choose Clip (8)' which contains a table of clips:

Clip	Title
85	Fractions, Percentages, Decimals
86	Percentage of an Amount (Calc.)
87	Percentage of an Amount (Non-Calc.)
88	Change to a Percentage (Calc.)
89	Change to a Percentage (Non-Calc.)
108	Increase/Decrease by a Percentage
109	Percentage Change
110	Reverse Percentage Problems

Revision workbooks

- ❖ Every student provided with one at start of Year 11 - FREE
- ❖ Working through weekly
- ❖ Consolidate topics from class
- ❖ Break down topics
- ❖ Self-assess
- ❖ Teacher checks
- ❖ Complete by June exams



Workbooks

- ❖ Use with MathsWatch or a revision guide
- ❖ Bring along to revision sessions in school
- ❖ Had a go/Nearly there/Nailed it!

ALGEBRA Had a go Nearly there Nailed it!

Inequalities

1 Write down the inequalities shown on each number line.

Guided Closed (solid) circles show numbers are included.

(a) $x \leq 4$ (1 mark)

(b) $x > -1$ (1 mark)

(c) $-2 < x < 4$ (1 mark)

(d) $-1 < x \leq 5$ (1 mark)

2 Show each inequality on the number line.

Use an open circle to show if a number is not included.

(a) $x \geq 3$ (1 mark)

(b) $x < 4$ (1 mark)

(c) $-2 < x \leq 6$ (1 mark)

(d) $-1 < x < 5$ (1 mark)

3 x is an integer. Write down all the possible values of x .

Guided $-3 < x \text{ and } \leq 4$

(a) $-3 < x \leq 4$
 $x = -2, -1, 0, 1, 2, 3, 4$ (1 mark)

(b) $-2 \leq x < 3$
 $-1, 0, 1, 2$ (1 mark)

(c) $-4 < x < 2$
 $-3, -2, -1, 0, 1$ (1 mark)

4 These numbers have been rounded. In each case, write an inequality to show the range of possible actual values.

(a) $a = 180$ (to the nearest 10)
 $175 < a < 185$ (1 mark)

(b) $b = 9000$ (to the nearest thousand)
 $8500 < b < 9500$ (1 mark)

(c) $c = 123.5$ (to one decimal place)

(d) $d = 10.8$ (to one decimal place)

MyMaths

- ❖ MyMaths.co.uk
- ❖ Additional tool
- ❖ Lessons broken down
- ❖ Questions to practice
- ❖ Booster packs

The screenshot displays the MyMaths.co.uk website interface. At the top, the logo 'MyMaths.co.uk' is accompanied by the tagline 'Bringing maths alive'. Navigation links for 'Assessment Manager', 'Help', and 'Log out' are visible, along with a search bar. A 'My portal' section includes buttons for 'boostices!', a user profile icon, 'Log in', and a help icon. A sidebar on the left lists various categories: 'Library' (Number, Algebra, Shape, Data, fSkills) and 'Revision and assessment' (GCSE booster packs for grades 3 and 4, 4 and 5, 6 and 7, and grades 8). The main content area is titled 'GCSE booster pack: grades 4 and 5' and features a list of topics: Calculations, Factors, powers, roots, Fractions, percentages, Measures, estimation, Algebra, Formulae, functions, Linear equations, Quadratic equations (highlighted), Simultaneous equations, Inequalities, Sequences, Linear graphs, Non-linear graphs, and Ratio, proportion. The 'Quadratic equations' section is expanded, showing an 'Assessment: Quadratic equations worksheet (4 and 5)' with a 'Worksheet' button and a list of related resources: 'Revision: Quadratic equations (4 and 5)', 'Brackets', 'Factorising quadratics 1', 'Quadratic equations 1', 'Properties of quadratics', and 'Sketching quadratic graphs 1'. Each resource is marked with a 'G45' icon and some have 'fh' icons.

Practice makes perfect!

- ❖ Maths revision is about doing
- ❖ The more questions answered, the more familiar the wording of exam questions becomes
- ❖ Highlight key words in questions - discuss what the question is asking
- ❖ Practise structuring working out - does the working out make sense? Does it flow in a logical way? Does the working out warrant the number of marks available?

In school

- ❖ New content coming to an end - revision in class
- ❖ Opportunities in class for papers and workbooks
- ❖ Morning Maths and Wednesday P5 sessions
- ❖ Class revision sessions - lunch/after school
- ❖ Lunchtime support - Thursdays Mrs Nash
- ❖ Exam practice - fortnightly
- ❖ March Mocks
- ❖ Walking Talking Mocks
- ❖ Half Term revision sessions - May
- ❖ Students must be consolidating at home for this to have an impact!

Useful websites

- ▶ <https://vle.mathswatch.co.uk/vle>
- ▶ www.mymaths.co.uk
- ▶ <http://www.bbc.co.uk/schools/gcsebitesize/maths/>