Year 9 Maths Topic Overview

Topics	DFM Key Skills	%
1. Indices and standard form		
1.1 Indices	88	
1.2 Calculations and estimates	188	
1.3 More indices	158, 299	
1.4 Standard form	302, 303	
1.5 Surds	336, 337	
2. Expressions and formulae		
2.1 Solving equations	257, 258	
2.2 Substituting into expressions	136, 196	
2.3 Writing and using formulae	198	
2.4 Using and rearranging formulae	201	
2.5 Index laws and brackets	191, 192, 252	
2.6 Expanding double brackets	300	
2.7 Factorise simple quadratics (not in text book)	253, 363	
2.8 Intro to completing the square (not in text book)	413a	
4. Multiplicative reasoning		
4.1 Enlargement	295, 296	
4.2 Negative and fractional scale factors	298	
4.3 Percentage change	215, 223	
4.4 Compound measures	326, 329	
4.5 Direct and inverse proportion	176	
5. Constructions		
5.1 Using scales	284	
5.2 Basic constructions	285	
5.3 Constructing triangles	285	
5.4 Using accurate scale diagrams	228	
6. Sequences, inequalities, equations and proportion		
6.1 nth term of arithmetic sequences	203, 204, 205	
6.2 Non-linear sequences	371	
6.3 Inequalities	310	
6.4 Solving equations	340	
6.4.5 Solving simultaneous equations	277	
6.5 Proportion	387	
7. Circles, Pythagoras and prisms		
7.1 Circumference of a circle	209, 212, 319	
7.2 Area of a circle	210, 211, 320, 324	
7.3 Pythagoras' theorem	289	
7.4 Prisms and cylinders	231-234	
7.5 Errors and bounds	311	
8. Graphs		
8.1 Using y = mx + c	274	
8.2 More straight-line graphs	275	
8.3 Simultaneous equations	410	
8.4 Graphs of quadratic functions	367	
8.5 More non-linear graphs	367	
9. Probability		
9.1 Mutually exclusive events	248, 250	
9.2 Experimental and theoretical probability	251	
9.3 Sample space diagrams	249	
9.4 Two-way tables	238	
9.5 Venn diagrams	242, 356	
9.6 Probability Trees (not in text book)	353b,d,e	
10. Comparing shapes		
10.1 Congruent and similar shapes	471	
10.2 Ratios in triangles	293	
10.3 The tangent ratio	322, 323	
10.4 The sine ratio	322, 323	
10.5 The cosine ratio	322, 323	
10.6 Using trigonometry to find angles	322, 323	
10.7 Use trigonometry to solve multi-step problems	322, 323	

Y10 Ch1. Number		
Number problems	37, 74, 75, 123, 125, 187	
Estimating	188	
HCF and LCM	53, 97, 161, 162	
Calculating with powers	136	
Zero, negative and fractional indices	191, 192, 196	
Standard form	302, 303, 304, 305	
Surds	335	
Y10 Ch3. Interpreting and representing data		
Statistical diagrams 1	238, 240	
Time series	400	
Scatter graphs	244	
Line of best fit	244	
Averages and range	132-134, 207	
Statistical diagrams 2	235, 236, 65, 246, 316	
Y10 Ch4. Fractions, Ratios and Percentages		
Fractions	29, 56, 101, 118, 165, 166	
Ratio and proportion	176, 177, 224, 225	
Percentages	130, 172, 215, 219, 220, 221, 223	
Fractions, decimals and percentages	172, 173	

Additional Resources

Worksheets on Sharepoint

These include **most** of the topics covered in the year. They each have three levels of difficulty (support, core and then depth) and the answers are at the end of the document.

Youtube - Corbett Maths

Here you can find lots of videos on GCSE topics. Complete the questions as you watch the video.

Corbett Maths

Here you can find worksheets filtered by topic as well as written and video solutions

Dr Frost

Use the Dr Frost numbers to the left to complete questions on these topics. You can also complete past paper questions on here too.

Set yourself up for success with assessments…

Chapter Assessments

Check up booklet

Complete the booklet,then go through it using the worked solutions.
Use the front cover to help guide you through next steps.

Strengthen/Extend

Decide from your check up booklet which one to attempt first.
Complete, ensuring full workings are done on paper/in your books.
Use this to identify topics for further revision at home.
Use resources from QR codes above to practise them.

End of Term/Year Assessments

Topic list

Identify areas to work on. Start practising these Key Skills on DFM

Key Skills HW on DFM

Two weeks before the test. Workings shown neatly in your book.

Pre-test and other resources given by teacher

Use these to identify topics for further revision at home.
Use resources from QR codes above to practise them.

Test corrections (Really important to improve exam technique)

Use worked/video solutions to make any necessary corrections in green pen
Ask your teacher if you still don't understand

DFM key skills

Identify a minimum of 3 Key Skills for further practice from your review sheet
Write these out neatly in the front of your exercise book with full workings
10 questions from each Key Skill
Use the Exam Skills to extend your learning if you don't have 3 Key Skills