

Higher Maths Revision

Date	topic	Pages (NE)		Done
05/03 /11	Prime factorisation	34,5 (2)	Express 168 and 180 as product of primes and HCF and LCM	
7	Indices 1	32,3 (2,4)	A11,A14 (A15)	
8	Indices 2	36-41 (7-13)	C5, C17,D4, E8	
9	Fractions	31 (15,16)	C1-C5, TY	
10	Solving linear equations Equations to solve problems	Ch 5 p43 (18-25)	A3,C3, E8	
11	Inequalities on a number line	p192 (27-31)	TY odds only	
12	Calculating angles	286,287(33-36)	Use internet or books to do work on parallel lines and angles (alternate etc) Mymaths? Not in Interact book	
14	Polygons	(37-41)		
15	3D shapes	(44-46)		
16	Symmetry	(56-61)		
17	Percentage increase and decrease	80,81(95-102)	A4,B5,	
18	Divide a quantity in a given ratio	213 (110-113)	A3-A6	
19	$y=mx+c$	132,133 (156-164)	C10, D3 (a,c,e,etc), E1, G1 (G6)	
21	Direct proportion Square and cubic proportion	216-218 (349-359)	D7, E4	
22	Inverse proportion	219-222 (360-367)	F9, (F13), T4	
23	Constructions: do some!	144-145 (148-153)	Make sure you can do all kinds of construction! Practice	
24	surds	457-460 (471-474)	P 463: T4,T5,T7,(T8)	
25	Upper and lower bounds	309-314 (474-478)	T2 (T3)Think carefully about division!	
26 and 28 and 29	Multiplying out brackets factorising Multiplying out brackets factorising Invent 5 pairs of brackets and multiply them out. Start with easy ones like $(x+6)(x+2)$ and build up to $(2x-3)(3x+4)$ and $9x^2 - 16$ etc. Come back tomorrow and factorise them. Set yourself 5 more for the 29 th .			
30	Algebraic indices	Ch 39p392 (407-414)	P399 TY	
31	Simplify algebraic fractions	381-383 (416-419)	A7,B7,C5	
1 st April	Learn the circle,parallelogram trapezium and triangle area formulae	91-94 (337-342)	They are not on your formula sheet but you will need them. B3, and use internet for circles.	
02/04 /11	Equations with algebraic fractions	384- 386 (437,8)	D2,D3 (D8,D13)	

Spend 10 mins on each of these

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4	Review 1	50 (439-441)	Qu 1	
5	Transformations: Translations enlargement	158,161-162	A5, B6 Fractional or negative scale factor, any centre	
6	Reflection rotation	159, 160	A9, A12,(A16) In any line,About any point and angle	
7	Compound interest	83-85(102-105, 585)	C3,C5, (C11,C13)	
8	dimensions	316-318 (342- 347)	5, 7, T5	
9	Changing the subject	298-303 (300- 301)	14F	
11	Simultaneous equations: algebraic	179-184 (167- 169)	7E :8, 7F, 8 Substitute back in to check	
12	Simultaneous equations: linear, graphical	185,6 (164-166)	7D:3,4,5, 6f	
13	Simultaneous equations: mixed	187 (449-452)	21J:4	
14	Problems and simultaneous equations	347 (169-171)	7G:3	
15	Rates of change Speed and density	54-60 (105-110)	5 I,J and K 5L: learn this formula	
16	Solving quadratic equations	341 (428-430)	21A one of each	
18	Solving quadratics by completing the square	342 (431-433)	21C: one from each	
19	Recurring decimals/fractions	454,5 (468-471)	Read explanation and try some examples	
20	sequences	365-368 (291- 295)	14A: 11,12; 14B 3,4,6 14C: 3,4, 11,19	
21	Shading regions	227-232 (171- 173)	7H: 21	
22, 23	Drawing quadratic graphs	257-259 (368.9)	18A: 14	
25	Using a quadratic graph to solve equations	260-265 (374- 375)	18E:7	
26	Cubic and other functions	276-278 (369- 373)	18B:12,18C :5; 18D8	
27	More graphs	279-282 (574- 575)	28E	
28	Circles: segments and sectors	244-246 (444- 446)	21H	
29	loci	143 – 147 (144- 145)		
30	Trig graphs	352-359, (283- 289)	13I try a couple	
2,3	Transformation of functions	416-418, 422- 423 (Ch 24)	24H	

4	Transformation of trig graphs	360-364 (502-503)	Try a few	
5,6	trigonometry	18, 102-110 (267-279)	Learn them, be able to find a length or a side.	
7	Pythagoras' Theorem (2D)	111-113 (175-180)	Make sure you try a few questions	
9	Pythagoras' Theorem (3D)	475-482 (183-185)	ditto	
10	substitution	269 (295-297)	14D try a few.	
11	Angle subtended at centre..	287 (530-5320)	You need to be able to use all these theorems and possibly prove them! Try a few from the exercise at the end of each theorem, and ex 26G, 26H	
12	Angle in a semi-circle	288 (528-5290)		
13	Angles in the same segment	289 (533-534)		
14	Opp. Angles of a cyclic quad Alternate segment theorem	290 (534-536) 292 (536-538)		
16	Volume and SA: prisms	96-8 (341-342)	The list of formulae you are given is on p 601. Learn all the others. Try one from each exercise.	
	cylinder	247 (391-394)		
17	pyramid	249-251(394-396)		
	sphere	255 (397-398)		
18	More difficult shapes	253 (402-405)	A Frustrum may well come up!	
19,20	Averages	61-66 (305-314)	Mean, median, mode and range.	
21	Moving averages	67-69 (309-311)	15Bq1	
23	Combinations of transformations	164-166 (137-139)		
24	Speed/distance-time graphs	NOT IN INTERACT! 376-378	18G: 3,4,5	
	Real-life graphs	378-382	18G:7,12	
25	Circles: equations	441-442		
26	Sampling	207 -211 (74-77)	4D	
27	Cumulative frequency graphs Box plots	148-155 (79-85) 318-326 327-331)	Median and IQR. Be able to draw a cf table.4F q1;325:q5 330q6	
28	Histograms Review 2 p88	375-380 (Ch 27)	Remember frequency DENSITY	
30	Scatter diagram with line of best fit	Not in interact. 85-92	Describe correlation 4H q1	

	Frequency polygons	64-65 (77-78)	Plot midpoints; join with a ruler. 4E
1 st June 11	Means and quartiles	152-155 (326-327)	Not covered well in the text book- use your old exercise bk or a revision guide. Choose 2 questions
	Drawing conclusions	331-333	
2,3	Relative frequency	169 (194-196)	
	Probability rules	170-177 (188-194)	9B
	Tree diagrams	173-176 (198-199)	9E : choose 1
4	Standard form	118 – 127 (114-122)	5R: 2,3,4
	Congruency	430-435(46-51)	

Your non-calculator paper is on Monday morning!*

Topics are now calculator based			
6	Sine rule	465-468 (457-461)	22C: 3
7	Cosine rule	469-471 (461-464)	22F
7	Similarity	321-323 (51-56)	3F: 7b, 8
8	Area of a triangle	472 (454-457)	22A:3,4,5
8	Trial and improvement	278 A7c (375-376)	18F:7 or 10
8	Solving quadratics by the formula	344-346 (433-437)	21D3e, 4
9	Trig and pythag in 3D	477-481 (465-466)	22G

*Due to lack of days I have left out vectors (ch 25) as we did them recently. Look them over if you can. They are likely to be non-calculator.

Remember your equipment: pen, sharp pencil, ruler, protractor, eraser, compasses (and calculator for paper 2).

Do you best and you will be fine!