

Revision List Y12 Pure End of Year Exams

Pure Year 1/AS			
Chapter 1 GCSE review	Basic algebraic manipulation, indices and surds	Laws of indices	Pg 2 Ex 1A, Pg 9 Ex 1D
		Expanding brackets, collecting like terms, factorising	Pg 4 Ex 1B, Pg 6 Ex 1C
		Surds	Pg 12 Ex 1E, Pg 13 Ex 1F
Chapter 2 GCSE review	Quadratic Functions	Solving quadratic equations by factorising, quadratic formula	Pg 19 Ex 2A, Pg 20 Ex 2B
		Complete the square	Pg 22 Ex 2C, Pg 24 Ex 2D
		Function notation	Pg 25 Ex 2E
		Quadratic graphs	Pg 27 Ex 2F
Chapter 3 GCSE review	Equations & Inequalities	Linear simultaneous equations	Pg 39 Ex 3A
		Quadratic simultaneous equations	Pg 41 Ex 3B
		Solving simultaneous equations graphically	Pg 42 Ex 3C
		Linear Inequalities	Pg 46 Ex 3D
Chapter 5 GCSE review	Straight Line Graphs	Using the equations of straight line	Pg 90 Ex 5A, Pg 91 Ex 5B, Pg 93 Ex 5C
		Parallel and perpendicular lines	Pg 97 Ex 5E, Pg 98 Ex 5F
		Length and area	Pg 100 Ex 5G
		Modelling with straight lines	Pg 103 Ex 5H
Chapter 9 GCSE review	Trigonometry	Cosine rule	Pg 174 Ex 9A
		Sine rule	Pg 179 Ex 9B
		Ambiguous case	Pg 183 Ex 9C
		Area of a triangle	Pg 185 Ex 9D
		Problem solving using trigonometry	Pg 187 Ex 9E
		Trigonometric graphs and graph transformations	Pg 192 Ex 9F, Pg 194 Ex 9G
Chapter 2, 3	Quadratic Functions Equations & Inequalities	The discriminant	Pg 30 Ex 2G
		Modelling with discriminants	Pg 32 Ex 2H
		Simultaneous Equation	Pg 41 Ex 3B
		Quadratic inequalities	Pg 48 Ex 3E
		Solving inequalities graphically	Pg 51 Ex 3F, Pg 53 Ex 3G

		Straight line recap	Pg 90 Ex 5A, Pg91 Ex5B, Pg 93 Ex 5C
Chapter 4	Graphs and transformations	Cubic, quartic and reciprocal graphs	Pg 60 Ex 4A, Pg 64 Ex 4B, Pg66 Ex 4C
		Points of intersection	Pg 68 Ex 4D
		Transforming graphs (translate, stretch, reflect)	Pg 71 Ex 4E, Pg 75 Ex 4F
		Transforming functions	Pg 79 Ex 4G
Chapter 6	Circles	Midpoints and perpendicular bisectors	Pg 114 Ex 6A, Pg 116 Ex 6B
		Equation of a circle	Pg 117 Ex 6c
		Intersection of lines and circles	Pg 121 Ex 6D
		Tangents and chords	Pg 123 Ex 6E
		Circles and triangle	Pg 128 Ex 6F
Chapter 7	Algebraic methods	Algebraic fractions	Pg 138 Ex 7A
		Polynomial division	Pg 139 Ex 7B
		Factor theorem	Pg 143 Ex 7C
		Proof	Pg 146 Ex 7D, Pg 150 Ex 7E
Chapter 8	Binomial theorem	Pascal's triangle	Pg 159 Ex 8A
		Factorial notation	Pg 161 Ex 8B
		Using the binomial theorem	Pg 163 Ex 8C, Pg165 Ex 8D, Pg 167 Ex 8D
A2 Pure Chapter 5	Trigonometry, radians	Radian measure	Pg 114 Ex5A, Pg 117 Ex5B
		Arc Length	Pg 118 Ex5C
		Areas of sectors and segments	Pg 122 Ex5D
		Solving trigonometric equations using radians	Pg 128 Ex5E
Chapter 10	Trig identities and Equations	Angles in all 4 quadrants and trig ratios	Pg 203 Ex 10A, Pg 208 Ex 10B
		Using identities	Pg 209 Ex 10c
		Solving equations	Pg 213 Ex 10D, Pg 217 Ex 10E
		Using identities to solve equations	Pg 219 Ex 10F
Chapter 11	Vectors	Properties of vectors	Pg 231 Ex 11A
		Representing vectors	Pg 235 Ex 11B
		Magnitude and direction	Pg 238 Ex 11C
		Position vectors	Pg 242 Ex 11D

		Solving vector problems	Pg 244 Ex 11E, Pg 248 Ex 7F
Chapter 12	Differentiation	Gradients of chords and differentiation by first principles	Pg 256 Ex 12A, Pg 259 Ex 12B
		Differentiation of functions	Pg 262 Ex 12C, Pg 264 Ex 12D, Pg 266 Ex 12E
		Gradients of tangents and normals	Pg 268 Ex 12F
		Increasing and decreasing functions	Pg 270 Ex 12G
		Second order differentials and stationary points	Pg 271 Ex 12H, Pg 273 Ex 12I
		Sketching gradient functions	Pg 277 Ex 12J
		Modelling with differentiation	Pg 279 Ex 12K
Chapter 13	Integration	Basic integration	Pg 288 Ex13A, Pg 290 Ex13B
		Finding functions	Pg 293 Ex13C
		Definite integrals	Pg 295 Ex13D
		Areas under curves and between curves and lines	Pg 297 Ex13E, Pg 300 Ex13F, Pg 302 Ex13G
Chapter 14	Exponentials & Logarithms	Exponential functions	Pg 312 Ex 14A
		$y = e^x$	Pg 314 Ex14B
		Exponential functions	Pg 316 Ex14C
		Logarithms, laws of logs and solving equations	Pg 318 - 324 Ex14D - F
		Natural logarithms	Pg 326 Ex14G
		Logarithms and non-linear data	Pg 328 Ex14H