Section A

1	(a) weak negative	1 1	−1 each additional wrong 'word' if more than 2 given
	(b) ruled line crossing x axis between 12 and 15, y axis between 5.5 and 7.5 inclusive	1	line must extend at least from 1 to 12 years
	(c) ft from their ruled line	1 **[4]**	tol. 2 mm
2	(a) 36	1	
	(b) 5.5 or 5 ½	3 **[4]**	M2 for $11 = 2x$ or $^-2x = {}^-11$ or W2 for $x = 11/2$, or M1 for $2x$ or $-2x$ or 11 or -11
3	(a) $2^3 \times 5 \times 7$ o.e.	2	M1 for prime factors seen in division or tree – at least 3 correct [may be seen in (b)]
	(b) 70	2 **[4]**	M1 for $2 \times 5 \times 7$ or for $210 = 2 \times 3 \times 5 \times 7$ or correct factor tree or division, or for 7 and 10 seen in lists of factors for 210 and 280
4	(a) two pairs of arcs with equal radii centres B,T, compass-drawn perp. bisector drawn	M1 1	tol 2 mm throughout must be at least 4 cm long
	(b) arc of circle centre B rad 8 cm arc of circle centre T rad 5 cm	1 1	ars must be compass-drawn; SC1 for radii for B 5 cm and T 8 cm
	correct shading	1 **[5]**	allow ft from wrong radii or hand-drawn arcs provided overlap
5	(a) 7, 7 seen in table all 7 pts correct	1 P1	may be implied by curve within tol of correct points.; ft from table if points definitely plotted; tol 1mm
	smooth curve joining their points	C1	within 2 mm; must extend from −1 to 5
	(b) 3.3 to 3.5 and 0.5 to 0.7	2 **[5]**	1 each
6	[$x = $] 39 and alternate angles [$y = $] 78 or ft $2 \times$ their x angle at centre = $2 \times$ angle at circumf.	R1 1 R1 **[3]**	allow Z angles must mention one of centre or circumf, and double o.e.
	Total section A	25	