Section A

1(a)	Expl'n e.g. unequal number of pupils in different years	W1	boys/girls unequal within year
(b)	e.g. 68/500 × 50 (= 7 pupils)	W2 **{3}**	W1 'use a stratified sample' or eg Y7 13 or for Y7 boys 0.1 × 130
2(a)	Sketch through (0,0) (90,1) (180,0)(270,-1)(360,0)	W1	
(b)	198 342	W1 W1 **{3}**	
3(a)	$9 - 4\sqrt{5}$	W2	M1 5 or $4\sqrt{5}$ seen
(b)	$1 + \frac{2\sqrt{5}}{5}$	W3 **{5}**	M1 × by $\sqrt{5}$ and/or $1+ (2/\sqrt{5})$ Or W2 numerator $5 + 2\sqrt{5}$ only
4(a)	1.35 to 1.4 -3.7 to –3.72	W1 W1	M1 reading from y = 15.5 or 15.5 seen
(b)	0.6 to 0.65 and –2.6 to-2.65	W3 **{5}**	M2 line $y= x+5$ drawn Or M1 $3x^2+7x=x+5$ s.o.i. SC1 2 readings ft from $y=5-x$
5(a)	$(x – 3)^2 - 5$	W3	M1 $(x – 3)^2$ or $(x + 3)^2 - 5$ Or M2 $x^2-3x-3x+9$
(b)	-5	W1 **{4}**	ft (a) condone (3,-5)
6	Translation 2 squares right. (-1.5,0) to between (0,0) and (1,0) (1.5,0) to between (3,0) and (4,0) (0,2) to (2,2)	 W1 W1 **{2}**	M1 translation 2 squares left
7	59	W3 **{3}**	M2 (n+65+68)/3 = 64 or M1 64 selected or (n+65+68)/3
Total Section A		**25**	