

## Section B

8	(a)	$f(2) = -10$ and $f(3) = 4$	1	Accept in part (b)
	(b)	One value between 2 and 3 correctly substituted One value between 2.5 and 3 correctly substituted  2.8	1 1 1	Results must be seen Results must be seen In each case, accept results truncated or corrected to 1 s.f. or better
			4	
9	(a)	$7.65 \times 10^{-4}$	1	
	(b)	$9.7 \times 10^8$	2	W1: figs 96 to 97 or W1: 26100 (o.e.) seen
			3	
10	(a)	$2x^5$	1	Accept $2 \times x^5$
	(b)	$x^2(2+x)$	1	
	(c)	$x^2 - 2x - 35$	2	W1: 2 terms correct or W1: $x^2 + 5x - 7x - 35$
			4	
11		14800	3	M2: $\frac{9620}{100 - 35}(\times 100)$ , implied by figs 148 or W1: use of 9620 = 65%
			3	
12		Point plotted at (1.5, 397) Point plotted at (2.5, 404)	2 2	W1: 397 seen or plotted W1: 404 seen or plotted W3: both plotted at ends of intervals Allow $\pm 1$ mm in plotting After W0: M1: use of $\frac{\sum x}{4}$ for one of the two intervals
			4	
13	(a)	$122^\circ$ to $122.1^\circ$	4	M3: $90 + (\cos^{-1} \frac{10.6}{12.5})$ W3: $32^\circ$ to $32.1^\circ$ or W2: $57.9^\circ$ to $58^\circ$ M2: $\cos^{-1} \frac{10.6}{12.5}$ or M1: $\cos$ or $\sin = \frac{10.6}{12.5}$
	(b)	18.4 to 18.5	3	M2: $\frac{10.6}{\cos 55}$ or $\frac{10.6}{\sin 35}$ M1: $\cos 55 = \frac{10.6}{AB}$ or M1: $\sin 35 = \frac{10.6}{AB}$  Evidence of scale drawing implies W0, W0
			7	
			25	
Paper Total = 50				