1	**(a)** (1) (3) 9 43 69 77 79 (80) B1	1	Table not copied so values not seen B0
	(b) All 8 points plotted ft P2		After P0, at least 5 correct plots ft P1
	Smooth ogive curve through all plotted points C1	3	Dependent on P1. Straight line graphs or ruled sections will be C0
	(c) **(i)** 192 –198 B1	1	Not 200.
	(ii) 142 – 148 B1	1	After B0 in **(c)**, reading their cumulative curve at 40 and 8 M1
	(d) Curve through the points (50,3), (350,80), (250,40), (275,60), (200,20) P3	3	After P0, 3 correct points plotted P2 2 correct points plotted P1
	(e) **(i)** 71 or 72 B1	1	In **(e) (i)** and **(ii)**, accept non integer values rounding to these given.
	(ii) 47, 48 or 49 B1	1	After B0 in **(e)**, M1 available for reading both graphs at 260
	(f) B with some support B1	1	Support such as the probabilities $\frac{11}{80}$ or $\frac{40}{80}$ The reference must imply a direct comparison of the brands at 250.
		[12]	

2 (a)	(0) (4) 30 80 136 (140) (0) 10 30 60 15 140	**B1** **B1**	**2**
(b)	Ignore plots at $x = 0$ [Accept two separate graphs] All 10 other points plotted √ (P1 for at least 6 plotted √) [Some points may represent 2 plots] 2 smooth curves, with at least one label, not grossly thick, through all appropriate plots of which at least 6 correct Curves must be ogive shape (no negative gradients)	**P2** **C1**	**3**
(c)(i)	64 to 68	**V1**	
(ii)	Their **(i)** – (42 to 44) evaluated √	**Q1**	
(iii)	English 56 to 58 and Maths 63 to 65	**N1**	**3**
(d)	Maths easier √, with sensible reason (e.g. greater median, or U.Q. L.Q. etc.) (Follow through from their curves if labelled) (There must be two curves)	**R1**	**1**
(e)(i)	$\frac{12}{49}$ cao	**B1**	**1**
(ii)	$\frac{4}{140}\times\frac{115}{140}+\frac{25}{140}\times\frac{136}{140}$ $\frac{193k}{980k}$ isw (e.g. $\frac{3860}{19600}$) **OR** 0.1965 to 0.1975 **OR** 19.65 to 19.75% After M0 allow SCB1 for $\frac{3860}{140\times139}=\frac{3860}{19460}=\frac{193k}{973k}$ or 0.1980 to 0.1990 isw	**M1** **A2**	**2**
			12

9	**(a)**	**(i)** 54 to 56	1		
		(ii) 28 to 30	1		
	(b)	Mathematics + valid reason	1	e.g. because median is lower or both medians stated. because the curve for Maths is to the left of/higher than the curve for English. Comparisons at arbitrarily chosen points will be 0	

9	**(a) (i)**	4 [minutes] 18 [seconds]	**1**	
	(ii)	1 [minute] 0 [seconds]	**2**	**B1** for attempt to read at 12.5 and 37.5
	(b)	10, 12, 13, 5, 2	**2**	**B1** for 3 correct
	(c)	17 [minutes] 30 [seconds]	**2**	**B1** for three times only seen including 6, 5:30 and time in range $5:30 < t \leqslant 6$