Qu	Scheme	Marks	AO
2. (a)	From [5,20) fd = 3 or 1 large square = 2.5 passengers o.e.	M1	2.2a
	Correct bar above [0, 5)	A1	1.1b
	Correct bar above [20, 40)	A1	1.1b
		(3)	
(b)	For [40, 65) **130** passengers or for [65, 80) **60** passengers	M1	2.1
	For attempt to find total number of passengers = **331**	A1ft	1.1b
	[Median =] $40+\frac{\frac{1}{2}("331")-140}{"130"}\times 25$ or $65-\frac{270-\frac{1}{2}("331")}{"130"}\times 25$ (o.e.)	M1	1.1b
	$= 44.9038\ldots$ = awrt **44.9**	A1	1.1b
		(4)	
(c)	Upper outlier limit = $58.9 + 1.5\times(58.9 - 27.3) = 106\ (.3) > 90$	M1	2.4
	So oldest passenger is not an outlier	A1	2.2a
		(2)	
		(9 marks)	

Notes

(a)

M1 for attempt at fd or a suitable method to deduce the scale for the histogram
May be implied by one correct bar.

1st A1 for first bar [0, 5) with fd = 1 or 2 large squares high

2nd A1 for third bar with fd = 4.5 or 9 large squares high

(b)

1st M1 for an attempt using their fd to find the missing frequencies. May be in table

1st A1ft for a clear attempt to find the total number of passengers (ft their 130 and 60)

2nd M1 for any expression/equation leading to correct Q_2 Must be using 40-65 class

2nd A1 for awrt 44.9 (allow $(n + 1)$ leading to 45)

(c)

M1 for finding the upper outlier limit (expression or awrt 106) and stating or implying > 90

A1 dep on M1 seen for deducing NOT an outlier