

14	(i)	A	<p>the cumulative frequencies have been plotted against the mid-points of the class intervals,</p> <p>mis-plotting [at centre of each class] reduces estimate (by 2.5) oe</p>	<p><b>B1</b></p> <p><b>B1</b></p> <p><b>[2]</b></p>	<p><b>2.4</b></p> <p><b>2.4</b></p>		
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Question			Answer	Marks	AOs	Guidance	
		<b>B</b>	grouped data has been used  grouping has slightly reduced the error introduced by misplotting (because the error is less than 2.5)	<b>B1</b>  <b>B1</b> [2]	<b>2.4</b>  <b>2.4</b>	or eg Hodge used the graph (instead of the raw data)	
<b>14</b>	<b>(ii)</b>		percentage unemployment is often estimated oe	<b>E1</b> [1]	<b>2.4</b>	allow data (on percentage unemployment) is not available for all countries <b>in Europe</b> oe	
<b>14</b>	<b>(iii)</b>		there are many other countries in the pre-release material; it is very unlikely that a random sample would only include European countries.	<b>E1</b> [1]	<b>2.4</b>		
<b>14</b>	<b>(iv)</b>		negative correlation / association (may be embedded) comparison of <i>p</i> -value with 0.05 or 0.01 or other appropriate significance level and supporting comment	<b>B1</b>  <b>B1</b> [2]	<b>2.2b</b>  <b>2.2b</b>	if <b>B0B0</b> allow <b>SC2</b> for eg comment on no significant association justified by comparison of <i>p</i> -value with appropriate significance level (eg 0.025)	
<b>14</b>	<b>(v)</b>		(even though this is interpolation), the scatter / weak correlation / presence of an outlier would suggest that the use of of a line of best fit is inappropriate	<b>E1</b> [1]	<b>2.2b</b>	allow explanation based on the value for Kosovo being an outlier or on it lying in the (large) gap in the scatter	