

## Population Pyramids Mark Scheme

**Q1.**

Question	Answer	Additional guidance	Mark
(a)	B1 6 (%)		(1)
(b)	B1 45 – 49		(1)
(c)	M1 $6.4 + 7.4 + 6 + 7$ A1 26.8(%) B1 Eric is correct	M1 for the addition of 4 numbers read off the population pyramid A1 for 26.8 A1 for Eric is correct	(3)
(d)	B1B1 for each comparison: eg <ul style="list-style-type: none"> <li>The percentage of men is greater in 2017</li> <li>The percentage of women is greater in 2017</li> <li>There is an equal percentage of men and women in each year</li> </ul>	B1B1 for each comparison	(2)

**Q2.**

Question number	Answer	Additional guidance	Mark
(a)	B1 9 (thousand)	B1 Accept 9000	(1)
(b)	B1 e.g. <ul style="list-style-type: none"> <li>age group is</li> <li>narrower/doesn't start at 10</li> </ul> there are fewer drivers (under 20) o.e.	B1 for equivalent wording suggesting that the class is 'smaller'. (e.g. drivers start from age 17) Condone sensible contextual comments, e.g. 'they have not been driving long', 'they are learning', 'they are more careful', etc.	(1)
(c)	M1 $25(000) + 21(000) + 19(000)$ A1 65 (thousand) B1 They have decreased / there were more claims (in 2014 by male drivers aged 20–49)/ there were fewer claims in 2015 o.e.	M1 for addition of 3 correct figures from population pyramid (o.e.) A1 for 65 or 65 000 (may be implied by 1700 or 1.7) B1 for a correct conclusion (This mark is independent of M1A1)	(3)

(d)	<p>B1 B1 for two correct statements:</p> <ul style="list-style-type: none"> <li>• Bars get shorter as age increases, o.e.</li> <li>• Bars are shorter for females, o.e.</li> </ul>	<p>NOTE: Condone use of e.g. 'accidents' for 'claims'.  1<sup>st</sup> B1 for a correct statement comparing <b>age</b>. Accept e.g. '20 – 29 make most claims'.  (Condone 'older drivers make fewer claims' o.e. but 'there are fewer older drivers' o.e. is B0)  2<sup>nd</sup> B1 for a correct statement comparing <b>gender</b>. (Condone 'male drivers make more claims' o.e. and reference to single age-groups, but 'there are more male drivers' o.e. is B0)  If both age and gender are included in a single comment, award this comment for the feature that is <b>different</b>.    NB: If B0 scored, then a single incomplete comment e.g. 'young males make more claims' can score B1B0 (as we don't know if they are comparing age or gender).</p>	(2)
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### Q3.

Question	Scheme	Marks
(a)(i)	25-29 (Allow 25 to 29 or 25/29)	B1
(a)(ii)	35-39 (Allow 35 to 39 or 35/39)	B1
(b)	65-69 (Allow 65 to 69 or 65/69)	B1
(c)	People aged 60 and over make up a larger percentage of the population in Richmond than in Hackney. o.e.	B1
		(1)
		(1)
		(1)
		[4]
	<b>Notes</b>	
(c)	<p><b>Must be a comparison.</b></p> <p>Allow converse statements about lower for Hackney.  Condone reference to <i>numbers</i> in this question.  e.g. higher in Richmond OR lower in Hackney ... are B1  Ignore any incorrect figures. e.g. condone half as many in Hackney for B1  Assume statement is about Hackney if no name given. So 'there are fewer' is B1  BUT: reference to <u>one</u> individual age group only OR <u>one</u> gender only ... are B0</p>	

## Q4.

Question number	Answer	Additional guidance	Mark
(a)	<p>B1 e.g. people aged 0–24 make up a greater <b>percentage</b> of the population in India than in the UK</p> <p>B1 e.g. from 0–24 there are <b>more</b> males than females in <b>both</b> countries</p>	<p>B1 for correct comparison of overall percentages / proportion of the population in 0-24 age group Do not allow comments about numbers for this mark Ignore references to individual bars</p> <p>B1 for correct comparison of male/female division of the population in 0-24 age group Allow approximately the same number of males and females in the UK</p>	(2)
(b)	<p>M1 <math>2.8 + 3.2 + 3.3 + 3.3 + 3.1 + 3.2 + 3.6 (= 22.5)</math></p> <p>M1 <math>\frac{22.5}{100} \times 65\,648\,000</math></p> <p>M1 <math>\frac{775\,300}{14\,770\,800} \times 1000</math></p> <p>A1 52.5</p>	<p>M1 for method to calculate total percentage of women in the 15–49 age range (may be implied by 22.1 – 22.9)</p> <p>M1 for method to calculate number of women in the 15–49 age range</p> <p>M1 for method to calculate general fertility rate</p> <p>A1 for awrt 52 or awrt 53</p>	(4)

## Q5.

Question number	Answer	Additional guidance	Mark
(a)	B1 5.8	B1 Allow 5.8%	(1)
(b)	B1 50 – 54	B1 Allow 50 to 54	(1)
(c)	B1 10 – 14	B1 Allow 10 to 14	(1)
(d)	B1 The percentages are the same.	<p>B1 for a correct explanation Ignore incorrect figures if they have stated that the percentages are the same.</p> <p>Allow they are both 12.7%</p>	(1)
(e)	B1 e.g. The figures have been rounded	B1 for a correct explanation	(1)