

| Question | Answer | Mark | Mark scheme | Additional guidance |
|----------|--------------------|------|---|---|
| 14 (a) | Complete pie chart | M1 | for a full method to find at least one angle, eg $\frac{360}{(45 + 20 + 55)} \times 20 (= 60)$ oe or $\frac{55}{(45 + 20 + 55)} \times 360 (= 165)$ oe or $\frac{135}{45} \times 20 (= 60)$ or $\frac{135}{45} \times 55 (= 165)$ | Award this mark even if more than 3 sectors are drawn |
| (b) | Explanation | A1 | for both angles correctly calculated or for one correct and accurately drawn angle | Do not award for drawing if the intention is to show more than 3 sectors |
| | | A1 | for a fully correct labelled pie chart | Each sector must be labelled with the associated language, not just angle size. |
| | | C1 | for explanation relating to population size, Acceptable examples No as we do not know the number of students in year 11 It would be true if the number of students in each year was the same No as pie charts show proportions not numbers (No) as the populations may not be equal No there may be more/less students in Yr10/Yr 11 Could be different number of degrees per person (on Yr 11 pie chart) Yes but only if there are the same number of students We don't know how many students are in year 10 compared to year 11 Not acceptable examples Yes as 150° is bigger than 135° We don't know how many students are in year 10 | |