1	(a)		$\frac{33}{60}$	M1	for method to find number of students who did not walk to school eg 15 + 12 + 6 or 60 – 27 (=33) or 0.55 or for $1-\frac{27}{60}$
				A1	for $\frac{33}{60}$ or equivalent fraction
	(b)		Pie chart drawn	M1	for method to find the angle for at least one sector eg $\frac{27}{60}\times360$, $\frac{12}{60}\times360$, $\frac{6}{60}\times360$, $27\div\frac{60}{360}$, $12\div\frac{60}{360}$, $6\div\frac{60}{360}$ oe (0.166..) NB: could be implied by one angle drawn accurately.
				M1	for drawing at least one sector accurately (from 4 sectors) eg 162°or 72°or 36°
				A1	for an accurately drawn pie chart
				B1	(dep on 4 sectors with at least one accurately drawn) for showing labels Walk Car Bicycle

2	(a)	100	B1	for answer in the range 95 to 100		
	(b)	660	M1	for reading at least 3 of the required figures from the graph eg 3 of "100", 260, 120, 340, 160, 440 **OR** for 260 – "100" (= 160) **or** 340 – 120 (= 220) **or** 440 – 160 (= 280) **OR** for "100" + 60 (= 160) **or** 80 + 100 + 40 (= 220) **or** 40 + 100 + 100 + 40 (= 280)	Figures may be seen on graph
			M1	(dep) for adding their 3 differences eg "160" + "220" + "280"	
			A1	for 660 or ft their answer to part (a)	
	(c)	Tablets	B1	Tablets	
		and statement	C1	Statement eg the bars get proportionally longer over time (most in 2017 and least in 2015) **or** they (more than) double each year **or** for an increase of 280 **or** numbers range from 60 to 340	Values quoted for tablets must be correct. Ignore any calculations relating to laptops and/or desktop computers whether correct or not. Award previous mark if "tablets" is not specifically stated but can be implied from statement.
	(d)	Statement (supported)	C1	for statement, eg (No because) we do not know costs or prices or profit.	Answer of 'Yes' gets C0 Answer of 'No' without justification gets C0

3		Correct pie chart	M1	for method to find at least one angle eg B: 360 ÷ "36" × 11 (= 110) **or** P: 360 ÷ "36" × 17 (= 170) **or** HD: 360 ÷ "36" × 8 (= 80)	Accept numbers if present in Number of fan column eg 0 added to a number is acceptable for this mark.
			A1	for at all 3 angles correctly calculated **OR** at least one accurately drawn angle	
			A1	for a fully correct labelled pie chart	Labels as "snacks" from table not just angle size.

4	(a)	Correct frequencies 8, 3, 5, 2	B2	all frequencies correct	Correct tallies alone scores B1 Correct frequencies with no tallies scores B2
			(B1	Starts to work with tallies, eg 2 tallies fully correct, or 2 frequencies fully correct)	Tallies need not be crossed
	(b)	Bar chart	M1	for labelling pet names on the horizontal axis or bars **OR** a linear scale on the vertical axis.	Accept unambiguous abbreviations for labels, eg D, R, C, H Horizontal axis does not need "pet" label
			M1	for at least two correct bars ft their table in (a)	Condone bars of unequal width Condone no gaps or inconsistent gaps Bars must be unambiguously correct for their scale
			A1	for a fully correct bar graph ft from their frequencies or tallies in (a).	All four bars must be correct with labels, ft, to award this mark. Vertical axis must have a suitable label, accept unambiguous abbreviations, eg freq or number Condone no gaps, or inconsistent gaps. Condone bars of unequal width Horizontal axis does not need "pet" label
	(c)	dog	B1	cao or ft from frequencies in (a) **or** chart in (b)	Mark to the benefit of the candidate if table and graph are different.

5	Two reasons	C2	for two correct reasons	
		(C1	for one correct reason) **Acceptable examples** No label for mark The vertical axis jumps from 0 to 71 The bars are not all the same width Toms bar is twice as wide as the others No axes Toms bar should not take up 4 squares Toms bar shaded 2 not 1 block Tom has 2 bars shaded but the others only have one bar shaded It is not labelled Tom has gone over 2 squares Toms bar is bigger than the others Toms bar is not correct The numbering is not correct **Not acceptable examples** There is no title Different sized gaps between the bars The bars are not symmetrical The bars are not the same size	Allow if one reason is fully correct and the other reason is not. For column accept strip, bar, block, line, cubes in an unambiguous explanation

6	Correct pie chart	M1	for a method to find at least one angle eg $\frac{50}{(50+45+25)} \times 360$ (= 150) **or** $\frac{45}{(50+45+25)} \times 360$ (= 135) **or** $\frac{25}{(50+45+25)} \times 360$ (= 75) oe	Do not award for drawing if the
		A1	for at all 3 angles correctly calculated **OR** at least one correct and accurately drawn angle (from no more than 3 sectors)	intention is to show more than 3 sectors 3 angles correct in table is enough for this mark irrelevant of diagram
		A1	for a fully correct labelled pie chart	Labels as "City" from table not just angle size.

7	(a)	5	B1	cao	
	(b)	5, 6	B1	cao	

8	7	P1 P1 A1	for 6 + 4 + 5 + 8 + 7 + 5 (= 35) for "35" ÷ 5 cao	Working may be seen on the diagram Allow one error in the 6 readings; intention to add must be clear.

9 (a)	120	M1 M1 A1	for sensible use of proportion eg $\frac{135}{90}$ (= 1.5) **or** $\frac{90}{135}$ $(=\frac{2}{3})$ **or** 135 × 4 (= 540) **or** 135 ÷ 9 (=15) **or** 80 ÷ 90 (= 0.888...) for a complete method eg 80 × "1.5" **or** 80 ÷ "$\frac{2}{3}$" **or** "540" × $\frac{80}{360}$ **or** "15" × 8 **or** "0.888..." × 135 cao	ie 135 ÷ 9 but not 135 ÷ 10 without 80 ÷ 9
(b)	$\frac{50}{540}$	M1 A1	for method to find total number of cars, eg 135 × $\frac{360}{90}$ (= 540) **or** for $\frac{50}{135}\times\frac{1}{4}$ oe **or** begins to work with probability by using a numerator of 50 eg $\frac{50}{a}$ where a >50 and an integer for $\frac{50}{540}$ oe ft "540" from part (a)	Accept any equivalent fraction, decimal form 0.09(25..) or percentage form 9(.25..)%