1	**Alternative method 1**		
	$\frac{450}{65-35}$ or $\frac{450}{30}$ or 15	M1	oe
	(360 – 65 – 35) × their 15 or 260 × their 15	M1dep	oe M2 $\frac{260}{30} \times 450$ or 8.66(…) × 450 or 8.67 × 450
	3900	A1	
	Alternative method 2		
	$\frac{360}{65-35} \times 450$ or $\frac{360}{30} \times 450$ or 12 × 450 or 5400	M1	oe
	$\frac{360-65-35}{360} \times$ their 5400 or $\frac{260}{360} \times$ their 5400	M1dep	oe eg 0.72(…) × their 5400
	3900	A1	
	Additional Guidance		
	260 ÷ 30 = 8.6 and 8.6 × 450 fully correct working seen		M1M1A0

Q	Answer	Mark	Comments
2(a)	**Alternative method 1**		
	$375 + 400 + 1475$ or 2250 or 13 seen or $\frac{59}{90}$ seen or [0.65, 0.66] seen	M1	oe for 375 allow 350 or 370 or 380 or 400 for 1475 allow 1450 or 1470 or 1480 or 1500 eg $400 + 400 + 1500$ any estimated values must be seen eg only seeing 2300 is M0
	$\frac{1475}{375+400+1475} \times 29250$ or 1475×13 or [0.65, 0.66] × 29250 or [19012.5, 19305]	M1dep	oe for 375 allow 350 or 370 or 380 or 400 for 1475 allow 1450 or 1470 or 1480 or 1500 for 29250 allow 29000 or 29200 or 29300 or 29500 or 30000
	19175	A1	
	Alternative method 2		
	[234, 238]	M1	may be on the diagram
	$\frac{\text{their [234, 238]}}{360} \times 29250$ or their [234, 238] × 81.25	M1dep	oe for 29250 allow 29000 or 29200 or 29300 or 29500 or 30000
	19175	A1	
	Additional Guidance		
	$375 + 400 + 1475 = 2250$ If they subsequently estimate 2250 no further marks can be scored		M1
	Answer 19175 is M1M1A1 unless it comes from rounding or truncating eg1 Alt 1 0.65555 × 29250 = 19175 eg2 Alt 1 0.65555 × 29250 = 19174.8 Answer 19175		M1M1A1 M1M1A0
	Alt 2 if their angle is outside the range [234, 238]		M0M0A0

Q	Answer	Mark	Comment
2(b)	It is lower than the answer to part (a)	B1	

Q	Answer	Mark	Comments
3	80 – 25 or 55 or 360 – 80 – 25 or 255	M1	oe implied by 1 degree = 2.4 people or 5 degrees = 12 people
	$\frac{132}{\text{their } 55} \times 360$ or 864 or $\frac{132}{\text{their } 55} \times 80$ or 192 or $\frac{132}{\text{their } 55} \times 25$ or 60 or $\frac{132}{\text{their } 55} \times$ their 255 or $\frac{132}{\text{their } 55} \times (80 + 25)$ or 252 or their $255 \div \frac{\text{their } 55}{132}$	M1dep	oe 2.4 × their 255 is M2 12 × 51 is M2 2.4 × 105 is M2
	612	A1	
	Additional Guidance		
	Up to M2 may be awarded for correct work, with no answer or incorrect answer, even if this is seen amongst multiple attempts		

Q	Answer	Mark	Comments
4(a)	$\frac{90 - 42}{100} \times 24\,000$ or $\frac{48}{100} \times 24\,000$ or 11 520 or $\frac{42}{100} \times 24\,000$ or 10 080 or $\frac{48 - 42}{100} \times 24\,000$ or 6 and 48 and 42 seen	M1	oe
	1440	A1	SC1 1920 or answer with digits 144
	Additional Guidance		
	Up to M1 may be awarded for correct work with no answer, or incorrect answer, even if this is seen amongst multiple attempts		
	Build-up to 48% or 42% must be correct or full method must be shown		
	eg only 48% × 24 000 with no or incorrect evaluation		M0

Q	Answer	Mark	Comments
4(b)	Ticks Cannot tell and valid reason	B1	eg ticks Cannot tell and We don't know the number sold (in 2019)
	Additional Guidance		
	Ignore calculations using percentages from the bar chart		
	Allow any unambiguous indication of Cannot tell with a valid reason		
	Ticks Cannot tell and They might have sold fewer drinks (in 2019)	B1	
	Ticks Cannot tell and It (only) gives percentages	B1	
	Ticks Cannot tell and It doesn't tell you how many coffees were sold	B1	
	Ticks Cannot tell and Don't have enough information	B1	
	Ticks Cannot tell and Both bars the same height	B0	
	Ticks Yes or ticks No	B0	

Q	Answer	Mark	Comments
5	$(8 + 9 + 9 + 6 + 9 + 10) \div 6$ or $51 \div 6$ or 8.5	M1	oe implied by 34
	$162 \div 360 \times 100$ or 45	M1	oe
	4 × their 8.5 + their 45 or 34 + 45	M1dep	oe dep on M2
	79	A1	SC2 53.5 or 57.5
	Additional Guidance		
	Check table and pie chart for working		
	34 + 45%		M1M1M1