

Functional Skills Maths Onscreen Mini Test | Level 1 Pie Charts | Mark Scheme

Non-Calculator

Q1

Question	Process	Mark	Mark Grid	Evidence
	Identifies right angle correctly or recognises 360 degrees is equivalent to 240 students	1 or	A	e.g. $90 (^{\circ})$ or $\frac{1}{4}$ or 0.25 or 25% or $360^{\circ} = 240$ (students) or $360 - 135 - 78 - 57 (=90)$ May be seen or implied in subsequent working
	Process to find number of Beauty students	2 or	AB	e.g. $240 \div 4 (=60)$
	Accurate figure	3	ABC	60
	Valid check	1	D	e.g. $60 \times 4 = 240$
Total marks for question		4		

Q2

Question	Process	Mark	Mark Grid	Evidence
	Accurate figure	1	A	360
	Identifies right angle correctly	1 or	B	$90 (^{\circ})$ or $\frac{1}{4}$ or 0.25 or 25% May be seen or implied in subsequent working
	Process to find figures to compare	2 or	BC	e.g. $1800 \div 4 (=450)$ or $1800 \div 360 \times 90 (=450)$ oe OR $540 \times 4 (=2160)$ or $540 \times 360 \div 90 (=2160)$ oe
	Valid decision with accurate figures	3	BCD	e.g. No AND 450 OR No AND 2160
Total marks for question		4		

Calculator

Q3

Question	Process	Mark	Mark Grid	Evidence
	Begins to work with angles or proportion	1 or	A	total angle cell in the table = 360 OR draws pie chart with 3 sectors AND labels the smallest theme park or the middle county show
	Process to find one angle or draw one angle correctly	2 or	AB	theme park cell in the table = 60 or county show cell in the table = 140 OR draws pie chart with 3 sectors AND one angle correctly drawn (ignore missing labels)
	Fully correct and labelled pie chart	3	ABC	60° angle drawn and labelled theme park AND 140° angle drawn and labelled county show ($\pm 2^\circ$)
Total marks for question		3		

Q4

Question	Process	Mark	Mark Grid	Evidence
	Accurate figure	1	A	90
	Begins to work with pie chart	1 or	B	e.g. $360 \div 60 (=6)$ OR $96 \div 16 (=6)$
	Process to calculate one angle size	2 or	BC	e.g. $'6' \times 35 (=210)$ OR $'6' \times 9 (=54)$
	Fully correct pie chart	3	BCD	210° drawn, banana and 54° drawn, chocolate
Total marks for question		4		

Q5

Question	Process	Mark	Mark Grid	Evidence
	Measures value of angle in "fish" sector	1	A	120° ($\pm 2^\circ$)
	Works with proportion	1 or	B	e.g. $360 \div \{\text{angle}\} (=3)$ OR $360 \div 180 (=2)$ OR $180 \div 360 (=0.5)$ OR $\{\text{angle}\} \div 360 (=0.33..)$
	Full process to find the number of students	2 or	BC	e.g. $180 \div '3' (=60)$ OR $\{\text{angle}\} \div '2' (=60)$ OR $'0.5' \times \{\text{angle}\} (=60)$ OR $'0.33..' \times 180 (=60)$
	Accurate figure from working	3	BCD	60 Ft their angle NB This question requires working shown
Total marks for question		4		

Q6

Question	Process	Mark	Mark Ref	Evidence
	Begins to work with angles or proportion	1 or	A	e.g. $360 \div 72 (= 5)$ OR $75 \div 15 (= 5)$ OR $44 \div 72 (= 0.61...)$ or $13 \div 72 (= 0.18...)$ May be seen in subsequent calculations
	Process to find one angle or draw 1 angle correctly	2 or	AB	e.g. $'5' \times 44 (= 220)$ oe OR $13 \div 72 \times 360 (= 65)$ oe May be indicated by one accurately drawn angle
	Fully correct and labelled pie chart	3	ABC	220° and 65° and labelled correctly ($\pm 2^{\circ}$)
Total marks for question		3		