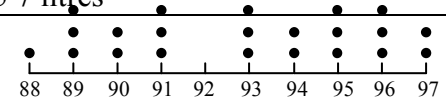


Qu	Give one mark for each •	Illustration for awarding mark
1	<p>ans : 8.5 2 marks</p> <ul style="list-style-type: none"> •¹ identifies quartiles •² calculates SIR 	<ul style="list-style-type: none"> •¹ 11, 28 •² $(28 - 11) \div 2 = 8.5$
2	<p>ans : $15p^2 - pq - 2q^2$ 2 marks</p> <ul style="list-style-type: none"> •¹ multiplies out brackets •² simplifies 	<ul style="list-style-type: none"> •¹ $15p^2 - 6pq + 5pq - 2q^2$ •² $15p^2 - pq - 2q^2$
3	<p>ans : =SUM(B2:D2) 1 mark</p> <ul style="list-style-type: none"> •¹ correct formula <p>ans: 1445 1 mark</p> <ul style="list-style-type: none"> •¹ adds entries in cells 	<ul style="list-style-type: none"> •¹ =SUM(B2:D2) •¹ 1445
4	<p>ans: $23 - 6x$ 3 marks</p> <ul style="list-style-type: none"> •¹ multiplies out bracket •² begins to simplify •³ completes simplification 	<ul style="list-style-type: none"> •¹-12x + 15..... •² 23 •³ - 6x
5	<p>ans: 15.7 litres 5 marks</p> <ul style="list-style-type: none"> •¹ uses correct radius and height •² knows how to find volume •³ calculates volume of cylinder •⁴ calculates volume of oil •⁵ states volume in litres 	<ul style="list-style-type: none"> •¹ $r = 10\text{cm}; h = 100\text{cm}$ •² $V = \pi r^2 h = 3.14 \times 10^2 \times 100$ •³ $314\,00\text{cm}^3$ •⁴ $314\,00 \div 2 = 157\,00\text{cm}^3$ •⁵ 15.7 litres
6a	<p>ans : dot plot drawn 2 marks</p> <ul style="list-style-type: none"> •1 suitable scale •2 dots in correct places 	 <ul style="list-style-type: none"> •1 •2
b	<p>ans: 2.5 3 marks</p> <ul style="list-style-type: none"> •1 identifies upper and lower quartiles •2 knows how to find SIQR •3 answer 	<ul style="list-style-type: none"> •1 95.5, 90.5 •2 $(95.5 - 90.5) \div 2$ •3 2.5
c	<p>ans: $\frac{3}{4}$ 2 marks</p> <ul style="list-style-type: none"> •1 correct numerator •2 simplifies fraction 	<ul style="list-style-type: none"> •1 18 •2 $\frac{3}{4}$
7	<p>ans: $(x + 4)(x - 7)$ 2 marks</p> <ul style="list-style-type: none"> •1 one factor correct •2 second factor correct 	<ul style="list-style-type: none"> •1 $(x + 4).....$ •2 $.....(x - 7)$

8	ans : 28°	3 marks	
	<ul style="list-style-type: none"> •¹ calculates angle OBA •² calculates angle OBC •³ calculates angle CBD 		<ul style="list-style-type: none"> •¹ 28° (isosceles Δ) •² $90^\circ - 28^\circ = 62^\circ$ (angle in a semi-circle) •³ $90^\circ - 62^\circ = 28^\circ$ (tangent)
9	ans: 2.5 visits	4 marks	
	<ul style="list-style-type: none"> •¹ completes fx column •² finds total of fx •³ finds total f •⁴ divides to find mean 		<ul style="list-style-type: none"> •¹ 0, 8, 20, 36, 20, 10, 6 •² 100 •³ 40 •⁴ $100 \div 40 = 2.5$ visits
			Total: 30marks