

Q	Marking instructions	AO	Marks	Typical solution
9(a)	Forms inverse proportion equation for P and substitutes given values to obtain given result AG	2.1	B1	$P = \frac{k}{n}$ $24 = \frac{k}{10}$ $k = 240$ $P = \frac{240}{n}$
	Subtotal		1	

Q	Marking instructions	AO	Marks	Typical solution
9(b)	Forms inverse proportion equation for C and substitutes given value PI by sight of 25 with or without inequalities	1.1a	M1	$C = \frac{l}{n^2}$ $60 = \frac{l}{100}$ $l = 6000$ $\frac{240}{n} > \frac{6000}{n^2}$ $240n > 6000$ $n > 25$
	Obtains correct value of constant of proportionality PI by sight of 25 with or without inequalities	1.1b	A1	
	Forms inequality linking P and their C . Condone equality at this stage. Or Shows an attempt at trial and error to solve the inequality Condone equality at this stage. Or States $n > 25$ $n = 25$ or $n \geq 25$ only	1.1a	M1	
	Obtains $n > 25$ ignore any extra inequality containing 0 CAO	1.1b	A1	
	Subtotal		4	

Q	Marking instructions	AO	Marks	Typical solution
9(c)	Identifies correctly the number of items that need to be sold to make a profit corresponding to their range of n from part (b) Providing $n > 0$ OE	3.5a	E1F	The artist makes a profit if they sell more than 25 items
	Subtotal		1	

	Question 9 Total	6	
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