Question	Answer	Mark	Mark scheme	Additional guidance
10	Proof	M1	for writing expressions for two consecutive even numbers, eg $2n$ and $2n + 2$ or $2n - 2$ and $2n$ or $2n + 2$ and $2n + 4$ oe (assuming n is any integer)	For both M marks accept use of linear expressions with a difference of 2, eg n and $n + 2$ or $n + 1$ and $n + 3$
		M1	(dep M1) for correctly expanding the squares of both expressions, eg $(2n + 2)^2 = 4n^2 + 4n + 4n + 4$ and $(2n)^2 = 4n^2$ or $(2n)^2 = 4n^2$ and $(2n - 2)^2 = 4n^2 - 4n - 4n + 4$ or $(2n + 4)^2 = 4n^2 + 8n + 8n + 16$ and $(2n + 2)^2 = 4n^2 + 4n + 4n + 4$ **or** for a correct expression using the difference of two squares eg $(2n + 2 + 2n)(2n + 2 - 2n)$ oe or $(2n + 2n - 2)(2n - (2n - 2))$ oe	Expressions need not be simplified for this mark
		C1	for a complete proof without any errors leading to eg $4(2n + 1)$ or $4(2n - 1)$ or to a statement that eg $8n + 4$ is a multiple of 4 because $8n$ and 4 are both multiples of 4	$4n^2 + 8n + 4 - 4n^2 = 8n + 4$ $4n^2 - (4n^2 - 8n + 4) = 8n - 4$ Accept eg $(2n)^2 - (2n + 2)^2$ $= 4n^2 - (4n^2 + 4n + 4n + 4)$ $= -8n - 4$ $= 4(-2n - 1)$ A proof using eg n and $n + 2$ must include a statement that n is even for the C mark to be awarded and a proof using eg $n + 1$ and $n + 3$ must include a statement that n is odd