

Q	Marking instructions	AO	Marks	Typical solution
7(a)	Substitutes values correctly into cosine rule to find any angle	1.1a	M1	$225^2 = 234^2 + 310^2 - 2 \times 234 \times 310 \times \cos A$ $\cos A = 0.690867$ $A = 46.3^\circ$
	Obtains correct angle AWRT 46.3°	1.1b	A1	
	Subtotal		2	

Q	Marking instructions	AO	Marks	Typical solution
7(b)	Uses $0.5 \times b \times c \times \sin A$ OE to find area	3.1a	M1	$\text{Area} = 0.5 \times 234 \times 310 \times \sin A$ $= 26223$ $\text{Number of sheep} = 26223 \div 1200$ $= 21.85$ $\text{Maximum number} = 21$
	Divides their area by 1200	1.1a	M1	
	Obtains 21	3.2a	A1	
	Subtotal		3	

	Question 7 Total		5	
--	-------------------------	--	----------	--