Question	Scheme	Marks	AOs
4(a)	$$\sigma_x^2 = \frac{110}{20} - \left(\frac{32}{20}\right)^2$$	M1	1.1b
	$$\sigma_x^2 = 2.94$$	A1	1.1b
		(2)	
(b)	$3.5 \times 14 \ (= 49)$	B1	1.1b
	$$\frac{32 + 3.5 \times 14}{20 + 14} \ (= 2.38...)$$	M1	2.1
	$$2.5 = \frac{\Sigma y^2}{14} - 3.5^2$$ $$\Sigma y^2 = 206.5$$	M1	2.1
	Combined variance $= \ = \dfrac{110 + '206.5'}{20 + 14} - ('2.38...')^2$	M1	1.1b
	awrt 3.63	A1	1.1b
		(5)	
		(7 marks)	
Notes:			
(a)	**M1:** Correct equation for variance		
	A1: 2.94 or equivalent		
(b)	**B1:** For finding or using Σy		
	M1: Correct method for finding combined mean seen or used		
	M1: $\Sigma y^2 = 206.5$ stated or used		
	M1: Correct method for combined variance, using their Σy^2 and their combined mean		
	A1: awrt 3.63		