Question	Scheme	Marks	AOs
4(a)	$\sigma = \left[\sqrt{\frac{S_{cc}}{n}} = \sqrt{\frac{394}{25}}\right] = 3.9698...$ awrt **3.97**	B1	1.1b
		(1)	
(b)(i)	$b = \frac{-3.5}{500}$ or $16.5 = a + 2200b$	M1	2.2a
	$= \mathbf{-0.007}$	A1	1.1b
		(2)	
(b)(ii)	$20 = a +$ "-0.007"(1700) or $20 = a + 1700b$	M1	2.2a
	$= \mathbf{31.9}$	A1	1.1b
		(2)	
			(5 marks)

Notes

(a)

B1: awrt 3.97 (allow s = awrt 4.05)

Mark (b)(i) and (b)(ii) together

(b)(i)(ii)

M1: deducing that the first bullet point can be used to :
Either set up a correct numerical expression for b (allow ±)

implied by ± 0.007 or $\pm\frac{3.5}{500}$

or write a correct equation from the first bullet point e.g. $16.5 = a + 2200b$
Allow equivalent use of the first bullet point e.g. $(20 - 3.5k) = a + (1700 + 500k)b$
NB: $(\pm)3.5 = a + 500b$ is M0

A1: -0.007 oe (allow standard form) correct answer scores M1A1.

M1: using the second bullet point with their value of b to find a
Either substituting "their b" into $20 = a + 1700b$ oe e.g. $20 -$ "their b" $\times 1700$
or writing the correct equation $20 = a + 1700b$ oe

A1: 31.9 oe correct answer scores M1A1.