1	(a)	50	M1	[2.5] × 20 (=50)	[2.5] a number in the range 2.3 to 2.7 or identified as the distance from Shelton to Trilby
			A1	for an answer in the range 46 to 54	
	(b)	60	M1	5 × 1200 (=6000) **or** 1200 ÷ 100 (=12) **or** conversion 5 ÷ 100 (=0.05)	
			A1	cao	

2	10 000	B1	cao	

3	47	P1	for process to find scale factor eg 62 ÷ 12.4 (= 5) **or** 12.4 ÷ 62 (= 0.2) **or** 9.4 ÷ 12.4 (= 0.758...) **or** 12.4 ÷ 9.4 (= 1.31..)	Note 1:500 is an acceptable scale factor Accept working in mixed units or with inconsistent units eg 620 ÷ 12.4 (= 50) for process marks only
		P1	for process to use the scale factor eg "5" × 9.4 **or** 9.4 ÷ "0.2" **or** 62 × "0.758.." **or** 62 ÷ "1.31.."	
		A1	Accept answers in the range 46.5 to 47.7	

4	(a)	300	M1	for a correct method to measure and convert one line to a distance in metres, eg. (AB =) 5 × 150 (= 750 or in the range 720 to 780) or (BC =) 4 × 150 (= 600 or in the range 570 to 630) or (AC =) 7 × 150 (= 1050 or in the range 1020 to 1080) **or** for 5 + 4 – 7 (=2 or in the range 1.4 to 2.6)	Accept measurements given in mm instead of cm for the first mark. Accept measurements given to a tolerance of ±2mm
			M1	for a complete method, eg. "750" + "600" – "1050" **or** "2" × 150	Where "750", "600", "1050" and "2" have come from their measurements
			A1	for answer in the range 210 to 390	
	(b)	288	B1	for answer in the range 286 to 290	

5	(b)	1.5	P1	for use of scale eg 6 × 25 000 (= 150 000) **or** for 25 000 ÷ 100 000 (= 0.25) or 25 000 ÷ 100 (= 250) or 25 000 ÷ 1000 (= 25)	
			P1	for "150 000" ÷ 100 000 (= 1.5) or "150 000" ÷ 100 (= 1500) or "150 000" ÷ 1000 (= 150) **or** for [0.25] × 6 (= 1.5)	[0.25] could be found by dividing 25 000 by 100 (= 250) or dividing 25 000 by 1000 (= 25)
			A1	for 1.5 oe	

6	(a)	30	B1	cao	
	(b)	2238 to 2296	M1	for a complete method eg attempts to read from the graph at a factor of 80 **and** scales up to 80 using a correct scale **or** attempts to read from the graph using numbers that sum to 80 **and** finds the sum of their readings **or** attempts to read from the graph a number that they then go on to scale up to 80 using a correct scaling factor	Condone some inaccuracy in reading from the graph, which should be given to within the nearest 50g
			A1	for an answer in the range 2238 to 2296	

7	100g butter 25g sugar 1 egg	P1 P1 P1 C1	for process to find the amount needed of one ingredient for 25 scones for process to find the amount needed for at least three ingredients for 25 scones **or** for process to find the correct amount more for at least two of butter, sugar, eggs for complete process to find amount more for each of butter, sugar, eggs for correct amounts more shown for butter, sugar, eggs	amount needed: 200g butter 875 flour 75 sugar 5 eggs Flour can be excluded, but no incorrect information about flour should be given.

8	(a)	16	M1 A1	for a ratio of $\frac{20}{5}$ or $\frac{5}{20}$ or 4 or 0.25 or $\frac{5}{4}$ or $\frac{4}{5}$ or 1.25 or 0.8 oe cao
	(b)	5.5	M1 A1	for 22 × "0.25" or 22 ÷ "4" oe oe