		or e.g. P($D \mid C$) ≠ P(D) and correct conclusion of not independent. If e.g. P(C) × P(D) is evaluated then it must be correct (allow to be rounded)

Question Number	Scheme	Marks
7 (a)	$b = \frac{5780}{6948} = 0.83189...$	M1 A1
	$a = 62 - 'b' \times 55 = 16.2458...$	M1
	So $p = 16.2 + 0.832t$	A1
		(4)
(b)	Every extra mark in the theory test adds "0.832" marks to the practical test	B1ft
		(1)
(c)	16.2 + 62 × 0.832 [= 67.784] or 16.2 + 20 × 0.832 [= 32.84]	M1
(i) &(ii)	68 or awrt 67.8 33 or awrt 32.8/32.9	A1ft A1ft
		(3)
(d)	Student A is interpolation (and student B is extrapolation)	M1
	So the result for student A (is more reliable)	A1
		(2)

	Notes	Total 10
(a)	**M1**	for a correct method to find b **Cannot be implied by awrt 0.83** but may be implied by a correct fraction. Condone $\frac{S_{tp}}{S_{tt}}$ to score this mark.
	A1	awrt 0.83 oe (condone $\frac{1445}{1737}$ but not $\frac{5780}{6948}$) May be seen in further work / final equation
	M1	for a correct method to find a **Cannot be implied by awrt 16.2**
	A1	for p = awrt 16.2 + awrt 0.832t (do not accept fractions for a and b for this mark) with all previous marks scored. Allow p = 16.25 Must be in terms of p and t **Note that answer with no working scores 0 marks**.
	Note	May see attempts to use the straight-line equation e.g. $p - 62 = \frac{5780}{6948}(t - 55)$ which would score M1A0M1A0 until further work done to simplify the gradient and reach the required form. Send to review if unsure.
(b)	**B1ft**	for a correct interpretation ft their gradient in context – must mention theory (t), practical (p) and marks (condone scores). Must be clear that for each additional theory test mark, the practical mark increases by "0.832"
(c)	**M1**	for substitution of 62 or 20 into their regression line. May be implied by awrt 68 or awrt 33 or the answer using their regression line to 2sf. Allow truncated.
(i)	**A1ft**	for 68 or awrt 67.8 ft their regression line provided the answer is >0
(ii)	**A1ft**	for 33 or awrt 32.8/32.9 ft their regression line provided the answer is >0
	Note	If their regression line is not correct then you will need to check their answer Answers should be correct to 3sf but condone if they have given them to the nearest integer.
(d)	**M1**	for a correct reason '**interpolation**' oe on its own or allow reference to the marks. e.g. A as the value/mark in the **theory test** used is within the range. i.e. it has to be clear that it is the **theory** test mark (t) that is within the range of values (and not the practical mark) Mentioning 62 or 20 will imply they are referring to the theory test marks or referring to the range 21 to 97 (condone 23 to 80). Allow e.g. '62 because it is closer to the mean' (it must be clear they are referring to the theory test mark)