Question		Working	Answer	Mark	Notes
13	(a)		0.3		B1 oe first race branch correct
			0.6, 0.4, 0.6	2	B1 oe second race branches correct
	(b)	0.7 × "0.6" (= 0.42) oe **or** "0.3" × "0.4" (= 0.12) oe **or** 0.7 × 0.4 (= 0.28) oe **or** "0.3" × "0.6" (= 0.18) oe			M1 ft their tree diagram dep on probabilities being less than 1
		"0.42" + "0.12" oe **or** 1 – "0.28" – "0.18"oe			M1 ft complete method to find probability that Emilie wins exactly one of the races
		Working not required, so correct answer scores full marks (unless from obvious incorrect working)	0.54	3	A1 oe, eg $\frac{27}{50}$ ft from their tree diagram on M marks only
	(c)	0.7 × 0.4 × (1 – 0.6) (= 0.112) oe **or** "0.54" × 0.3 (= 0.162) oe **or** $0.7\times"0.6"\times0.3+"0.3"\times"0.4"\times0.3(=0.162)$			M1 ft
		eg "0.112" + "0.162"			M1 ft For a fully correct method
		Working not required, so correct answer scores full marks (unless from obvious incorrect working) *NB: allow decimals, fractions or percentages with % as oe for probability*	0.274	3	A1 oe, eg $\frac{137}{500}$ ft from (a) and (b) on M marks only
					Total 8 marks