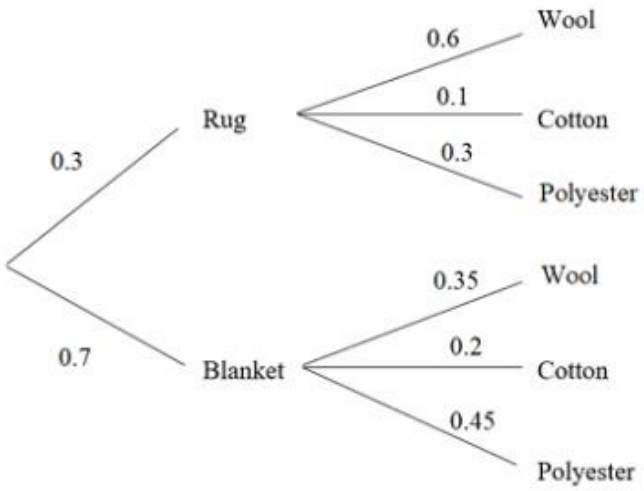
Daily Question Applied Mathematics Day 5 Mark Scheme

Question Number	Scheme	Marks
(a)		B1 B1
		(2)
(b) (i)	$P(W') = 0.3\times(0.1+0.3)+0.7\times(0.2+0.45)$ or $P(W') = 1-(0.3\times0.6+0.7\times0.35)$ $= \underline{\mathbf{0.575}}$	M1 A1
		(2)
(ii)	$P(B \mid W') = \frac{P(B\cap W')}{P(W')} = \frac{0.7\times(0.2+0.45)}{'0.575'}$	M1
	$= \frac{91}{115}$	A1
		(2)

	Notes		Total 6
(a)	**B1**	At least 5 probabilities correct (allow fraction, percentage or decimal) But do not allow eg $\frac{3.5}{10}$ or 35 (without percentage symbol)	
	B1	All 8 probabilities correct (allow fraction, percentage or decimal) But do not allow eg $\frac{3.5}{10}$ or 35 (without percentage symbol)	
(b)(i)	**M1**	Correct probability expression ft the probabilities from their part (a)	
	A1	$\frac{23}{40}$ oe allow equivalent fraction, decimal or percentage	
(ii)	**M1**	Correct method for conditional probability used ft their part (a) and ft their (b)(i)	
	A1	awrt 0.791 allow awrt 79.1%	