10	**(a)**		$y^7 + 7xy^6 + 21x^2y^5 + 35x^3y^4$	**B2** **[2]**	**1.1** **1.1**	**B1** for three terms correct	
10	**(b)**		$21x^2y^5 = 35x^3y^4$ $\frac{x}{y} = \frac{3}{5}$ or 0.6	**M1** **A1** **[2]**	**3.1a** **1.1**	Equate their terms in x^2y^5 and x^3y^4	
10	**(c)**		$\mathrm{P}(L=k) = {}_7C_k\left(\frac{3}{8}\right)^k\left(\frac{5}{8}\right)^k$ $\mathrm{P}(L=2) = {}_7C_2\left(\frac{3}{8}\right)^2\left(\frac{5}{8}\right)^5$ and $\mathrm{P}(L=3) = {}_7C_3\left(\frac{3}{8}\right)^3\left(\frac{5}{8}\right)^4$ So $\mathrm{P}(L=2) = 21\times\frac{3^2\times5^5}{8^7} = 7\times\frac{3^3\times5^5}{8^7}$ and $\mathrm{P}(L=3) = 35\times\frac{3^3\times5^4}{8^7} = 7\times\frac{3^3\times5^5}{8^7}$ so they are equal	**M1** **M1** **E1** **[3]**	**3.3** **3.4** **2.1**	Seen or implied Attempt to find the probabilities for each case For both values and a conclusion	