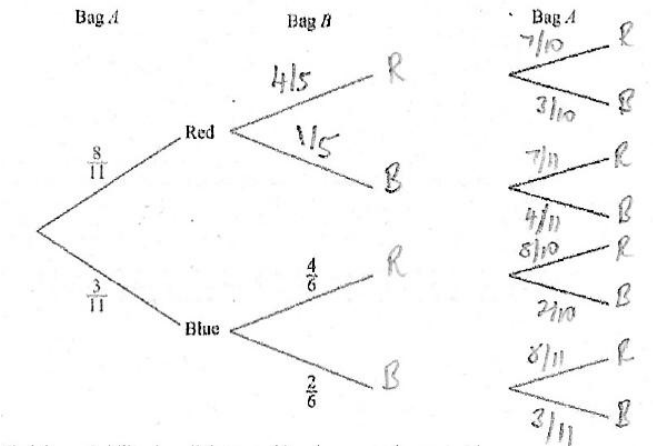


2(a)	$\left[\frac{1}{6} \left(\frac{5}{6} \right)^7 = \right] 0.0465$
2(b)	$\left(\frac{5}{6} \right)^4 \left(\frac{1}{6} \right)^3 \times {}^6C_2$
	0.0335

4(a)	
4(b)	$[P(RRR) + P(BBB) =] \frac{8}{11} \times \frac{4}{5} \times \frac{7}{10} + \frac{3}{11} \times \frac{2}{6} \times \frac{3}{11}$
	$\left[\frac{224}{550} + \frac{18}{726} \right] = \frac{1307}{3025}, 0.432$

4(a)	$[P(BB) = 2 \times P(CC)]$ $\frac{6}{18} \times \frac{x-12}{x} = 2 \times \frac{10}{18} \times \frac{9}{x}$ $\left[\frac{x-12}{3x} = \frac{10}{x} \right]$
	$x^2 - 12x = 30x$ or $x^2 - 42x = 0$ or $x(x - 42) = 0$
	$[x =]42$

4(b)

BB	$\frac{6}{18} \times \frac{30}{42}, \frac{6}{18} \times \frac{(x-12)}{x}$	$\frac{10}{42}, 0.238$
CC	$\frac{10}{18} \times \frac{9}{42}, \frac{10}{18} \times \frac{9}{x}$	$\frac{5}{42}, 0.119$
TT	$\frac{2}{18} \times \frac{3}{42}, \frac{2}{18} \times \frac{3}{x}$	$\frac{1}{126}, 0.00794$

$$= 0.365, \frac{23}{63}$$