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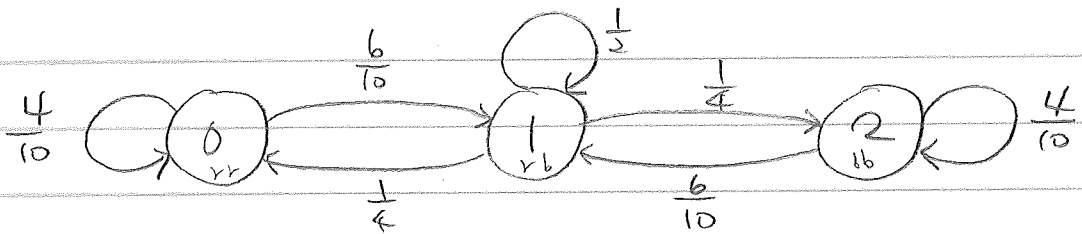
Math 321

4/20/2012

No. State 0 = A has 2 red marbles.

State 1 = A has 1 red and 1 blue marbles

State 2 = A has 2 blue marbles.



$$P = \begin{bmatrix} 0.4 & 0.6 & 0 \\ 0.25 & 0.5 & 0.25 \\ 0 & 0.6 & 0.4 \end{bmatrix}$$

70 A  
71 A

11.  $A_1 = 2 \times 3$     $A_2 = 2 \times 2$     $A_3 = 3 \times 2$

$$P = \begin{bmatrix} 0 & 0 & 1 \\ 1 & 1 & 0 \\ 0 & 1 & 1 \end{bmatrix} \begin{bmatrix} 0 & 0 & 1 \\ 1 & 1 & 0 \\ 0 & 1 & 1 \end{bmatrix}$$
$$= \begin{bmatrix} 0 & 1 & 1 \\ 0 & 1 & 1 \\ 1 & 2 & 1 \end{bmatrix}$$



$$\therefore 1+1+1+1+1+2+1 = 8$$