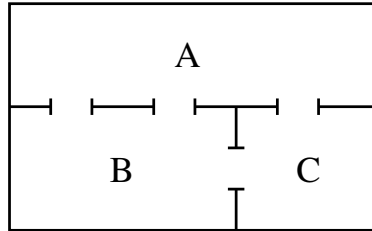


[nex43] House of the mouse: mouse with memory

A trained mouse lives in a house with floor plan as shown. A bell rings at regular time intervals, prompting the mouse to either stay put or to go to an adjacent room through any door with no preference. When the mouse is in rooms B or C he reacts at the first ring of the bell but when he is in room A he reacts only at the second ring. What fraction of the time does the mouse spend in each room on average?



Solution: