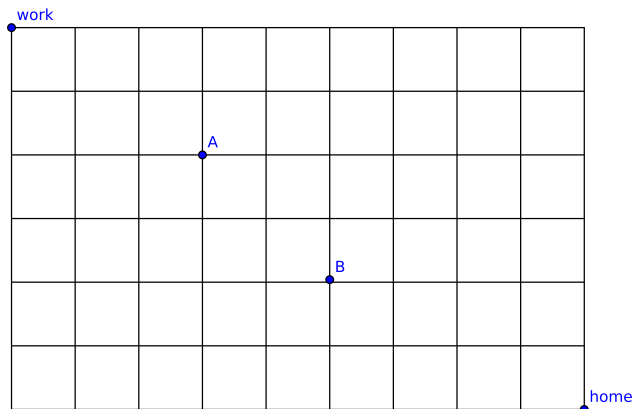


Quiz 5

Show all your work to receive full credit. Use the diagram to answer the questions



Consider the sample space $S = \{\text{shortest paths from work to home}\}$ and let E be the event “pass thru A ” and F the event “pass thru B ”. (5 pts. each)

1. Find $Pr(E)$ and $Pr(F)$.
2. Find $Pr(E \cap F)$ and $Pr(F|E)$.
3. If E and F are two events of a sample space which are independent and $Pr(E) = .6$ and $Pr(F) = .5$, then what is $Pr(E \cap F)$? (5 pts.)