## 2C Conditional Probability in Venn Diagrams

1. $A$ and $B$ are two events such that $P(A)=0.55, P(B)=0.4$ and $P(A \cap B)=0.15$.
a) Draw a Venn diagram showing the probabilities for events $A$ and $B$.

Find:
b) $P(A \mid B)$
c) $\quad P(B \mid(A \cup B))$
d) $P\left(A^{\prime} \mid B^{\prime}\right)$

