

Ex. 5

Probability that they will win?

Win on Calm days or Win on Windy day
 0.6 + 0.7

* 40% chance winds
 * 60% chance calm day

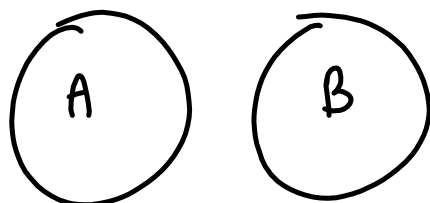
$$\begin{array}{l}
 \text{Calm day} \qquad \qquad \qquad \text{Windy day} \\
 \hline
 (0.6)(0.6) + (0.7)(0.4) \\
 \text{(win on calm day)} \quad \text{(calm)} \\
 = 0.64 = 64\%
 \end{array}$$

$$\begin{aligned} & 1. \text{ winning/calm} + \text{winning/windy} \\ & (0.8)(0.65) + (0.5)(0.35) \\ & = 69.5 \Rightarrow 70\% \end{aligned}$$

$$2. 57\%$$

$$3. 46\%$$

2.



$$P(A \cup B) = P(A) + P(B)$$
$$54\% = 17\% + P(B)$$

$$54\% - 17\% = P(B)$$

$$39\% = P(B)$$

$$P(B)' = 100\% - 39\% = 61\%$$