Exam P 001 (General Probability)

Review: Probability of the Union of two events A or B

\[ \Pr(A \cup B) = \Pr(A) + \Pr(B) - \Pr(A \cap B) \]

Prob of the intersection of two events A and B

Solution:

\begin{align*}
(0.28) \text{ Gymnastics} & \quad (0.29) \text{ Baseball} \\
0.12 & \quad 0.06 & \quad 0.11 & \quad 0.02 & \quad 0.04 & \quad 0.05 & \quad 0.05
\end{align*}

Thus we have

\[ \Pr(C \cup B \cup S) = 0.12 + 0.06 + 0.11 + 0.02 + 0.08 + 0.04 + 0.05 \]

\[ = 0.48 \]

\[ \Pr(\text{not } C \cup B \cup S) = 1 - 0.48 = 0.52 \]