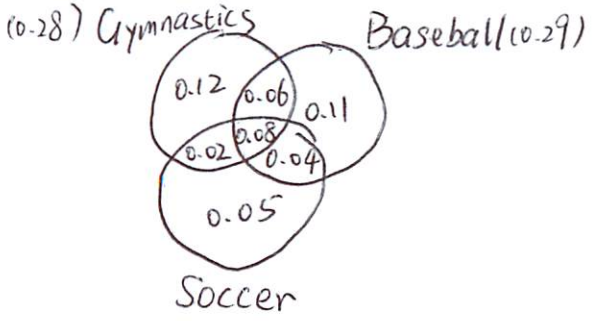
Exam P 001 (General Probability)

Review : Prob 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 :



$\Leftarrow$ $0.02 = 0.10 - 0.08$

$\Leftarrow$ $0.12 = 0.28 - (0.06 + 0.08 + 0.02)$

$0.11 = 0.29 - (0.06 + 0.08 + 0.04)$

$0.05 = 0.19 - (0.02 + 0.08 + 0.04)$

Thus we have

$$Pr(G \cup B \cup S) = 0.12 + 0.06 + 0.11 + 0.02 + 0.08 + 0.04 + 0.05$$

$$= \boxed{0.48}$$

$$Pr(\text{not } G \cup B \cup S) = 1 - 0.48 = \boxed{0.52}$$