

2.4 Denote the events,

$$C = \{ \text{ knows C/C++ } \}, \quad F = \{ \text{ knows Fortran } \}.$$

Then

$$(a) \quad P\{\bar{F}\} = 1 - P\{F\} = 1 - 0.6 = \boxed{0.4}$$

$$\begin{aligned} (b) \quad P\{\bar{F} \cap \bar{C}\} &= 1 - P\{F \cup C\} = 1 - (P\{F\} + P\{C\} - P\{F \cap C\}) \\ &= 1 - (0.7 + 0.6 - 0.5) = 1 - 0.8 = \boxed{0.2} \end{aligned}$$

$$(c) \quad P\{C \setminus F\} = P\{C\} - P\{F \cap C\} = 0.7 - 0.5 = \boxed{0.2}$$