

chapter-2 homework

1. $A = \{\}$ (空集合) · 求 $P(A)$ 。

$$P(A) = \emptyset$$

2. $A = \{a, b, c\}$ · 求 $P(A)$ 。

$$P(A) = \{\emptyset, \{a\}, \{b\}, \{c\}, \{a, b\}, \{a, c\}, \{b, c\}, \{a, b, c\}\}$$

3. $A = \{a, b, c, d, e, f\}$ · 求 $P(A)$ 。

$$\begin{aligned} P(A) = \{ & \emptyset, \{a\}, \{b\}, \{c\}, \{d\}, \{e\}, \{f\}, \\ & \{a, b\}, \{a, c\}, \{a, d\}, \{a, e\}, \{a, f\}, \\ & \{b, c\}, \{b, d\}, \{b, e\}, \{b, f\}, \\ & \{c, d\}, \{c, e\}, \{c, f\}, \\ & \{d, e\}, \{d, f\}, \\ & \{e, f\}, \\ & \{a, b, c\}, \{a, b, d\}, \{a, b, e\}, \{a, b, f\}, \{a, c, d\}, \{a, c, e\}, \{a, c, f\}, \{a, d, e\}, \{a, d, f\}, \{a, e, f\}, \\ & \{b, c, d\}, \{b, c, e\}, \{b, c, f\}, \{b, d, e\}, \{b, d, f\}, \{b, e, f\}, \\ & \{c, d, e\}, \{c, d, f\}, \{c, e, f\}, \\ & \{d, e, f\}, \\ & \{a, b, c, d\}, \{a, b, c, e\}, \{a, b, c, f\}, \{a, b, d, e\}, \{a, b, d, f\}, \{a, b, e, f\}, \{a, c, d, e\}, \{a, c, d, f\}, \{a, c, e, f\}, \{a, d, e, f\}, \\ & \{b, c, d, e\}, \{b, c, d, f\}, \{b, c, e, f\}, \\ & \{b, d, e, f\}, \\ & \{c, d, e, f\}, \\ & \{a, b, c, d, e\}, \{a, b, c, d, f\}, \{a, b, c, e, f\}, \\ & \{a, b, d, e, f\}, \\ & \{a, c, d, e, f\}, \\ & \{b, c, d, e, f\}, \\ & \{a, b, c, d, e, f\}\} \end{aligned}$$