

Practice 8, p191

$$A = \{1, 2, 3\}$$

$$P(A) = \{\emptyset, \{1\}, \{2\}, \{3\}, \{1, 2\}, \{1, 3\}, \{2, 3\}, A\}$$

Practice 9: $\text{Card}(S) = n$
(Cardinality), then
 $\text{Card}(P(S)) = 2^n$

Practice 3a:

$$A = \{5, 6, 7, 8, \dots\}$$

$$= \{x \mid x \in \mathbb{N} \wedge x \geq 5\}$$

$$B = \{3, 4, 5\}$$

$$= \{x \mid x \in \mathbb{N} \wedge 3 \leq x \leq 5\}$$

~~$B \not\subseteq A$~~ ~~$A \not\subseteq B$~~ ~~$A = B$~~

~~$B \subset A$~~

Suppose
 $A = B$

Then

~~$B \not\subseteq A$~~
 ~~$B \subset A$~~

$$B \subseteq A$$

$$B \subset A$$