Exercise 5.23

Write A for Alice, B for Bob, and C for Charlie.

There will be 8 elements in the powerset — the challenge is to get the ordering right.

As an example we have $\{A, B\} \sqsubseteq \{A\}$ because we never violate the security policy by loosing B as a reader.

Hence the solution is the following Hasse diagram:

$$\{\ \}$$

$$\{A\} \qquad \{B\} \qquad \{C\}$$

$$\{A, B\} \qquad \{A, C\} \qquad \{B, C\}$$

$$\{A, B, C\}$$