1. Let \( B = \{a, b, c, d\} \) and let \( C = \{M \mid M \subseteq B \text{ and } 1 < |M| \leq 3\} \). What is \(|C \times C|\)?
2. Let \( A = \{1, 2, 3, 4\} \) and \( B = \{3, 4, 5\} \). Let \( C = \{(a, b) \in A \times B \mid a < b\} \). What is \(|A \times C|\)?