## Quiz 1: September 30, 2021

Name:

## Student ID:

1. (4 points) Suppose that $|A|=m$ and $|B|=n$, give the following cardinalities:
(a) $|\mathcal{P}(\mathcal{P}(\mathcal{P}(A)))|$
(b) $|\mathcal{P}(A \times B)|$
2. (6 points) If $A=\{1,2\}, B=\{z\}$, give the power sets of $A, B$, and $A \times B$
