

## Quiz 1

**True/False** - No explanation needed. (2pts)

1. Some counting problem about DNA sequences may not involve powers of 4, although there are 4 bases of nucleotides. True/False
2. The formula  $|B \setminus A| = |B| - |B \cap A|$  is false when the set  $B$  is contained in the set  $A$ . True/False

**Problems** - Need justification. No justification means **zero**!

1. How many functions are there from the set  $\{1, 2, 3, 4, 5\}$  to the set  $\{1, 2, 3\}$ ? (5pts)

2. How many 4-digits numbers that contain at least one 1? (5 points)