Circle True or False or leave blank. (1 point for correct answer, -1 for incorrect answer, 0 if left blank)

- 1. True False Sometimes, we have to use both the product rule and the sum rule to solve a problem.
- 2. True False Whenever the problem says "at least", then we have to use complementary counting.

Show your work and justify your answers. Please circle or box your final answer.

3. (10 points) (a) (3 points) How many different license plates are there if a license plates consists of 3 letters followed by 3 numbers or consists of 6 numbers.

(b) (4 points) How many numbers less than or equal to 100 are divisible by 4 or 5?

(c) (3 points) How many ways are there to flip 5 coins and get at least 1 head?