

I pledge my honor that I have neither given nor received aid on this exam.

NAME

SSN (last 4 digits)

Show all work (attach work pages). Write on one side of page only. Write answers in space provided. Staple in upper left-hand corner.

Fran and Ron play a series of independent games. Fran's probability of winning any particular game is 0.6 (and Ron's probability of winning is therefore 0.4). Suppose that they play a best-of-5 tournament. (That is, the winner of the tournament is the first person to win 3 games.)

1. Find the probability that Fran wins the tournament in 3 games.

1) _____

2. Find the probability that the tournament lasts exactly 3 games.

2) _____

3. Find the probability that the tournament lasts exactly 4 games.

3) _____

4. Find the probability that Fran wins the tournament.

4) _____

5. Find the probability that the tournament lasts exactly 3 games if it is won by Fran.

5) _____

6. Find the probability that Fran won the tournament if it lasted exactly 3 games.

6) _____