

MAS 170 Elementary Statistics Fall 2021
Sum of Draws Practice Problems, Ch 16 to 18

Problems 1--9 below are about the following game. A fair die is rolled 600 times. On each roll, you win \$4 if you get a 6. You lose \$1 if you get something different from a 6.

1. The total winnings will be about \$_____ give or take \$_____ or so.
2. The chance of breaking even or better is about _____.
3. The number of sixes rolled will be about _____ give or take _____.
4. The chance that the number of sixes will be ten or more above the expected number is about _____.
5. The sum of the numbers on the die face on all the rolls will be about _____ give or take _____.
6. The chance that the sum will be in the range 2050--2150 is about _____.
7. There is about a 50% chance that the sum will be in the range 2100 plus or minus _____.
8. The total number of even rolls will be about _____ give or take _____.
9. The chance that the number of even rolls will be off by 20 or more from the expected number is about _____.