## Practice for Quiz 2

(The quiz will be on Friday, April 4.) Math 125 Kovitz Spring 2025

- 1. A fair die is rolled four times.
  - (a) The chance that at least one of the rolls shows the 3 spot is:
    (A) 36.7% (B) 38.6% (C) 48% (D) 52% (E) 67%
  - (b) The chance that exactly one of the rolls shows the 3 spot is:
    (A) 10%
    (B) 25%
    (C) 38.6%
    (D) 48%
    (E) 52%
  - (c) The chance that exactly two of the rolls show the 3 spot is:
    (A) 1.93%
    (B) 7.7%
    (C) 11.57%
    (D) 38.6%
    (E) 50%
- 2. A quiz contains six multiple-choice questions. Each question has five possible answers, only one of which is correct.

A student answers the six questions randomly.

- (a) The chance that the student gets at least one question correct is:
  (A) 1.54%
  (B) 26.2%
  (C) 39.3%
  (D) 73.8%
  (E) 99.99%
- (b) The chance that the student gets exactly one question correct is:
  (A) 1.54%
  (B) 26.2%
  (C) 39.3%
  (D) 73.8%
  (E) 99.9%
- 3. Seven cards are drawn at random with replacement from a standard deck of cards. The deck contains 13 hearts out of 52 cards.
  - (a) The chance that at least one of the seven cards drawn is a heart is around:
    - (A) 0.128% (B) 13.35% (C) 31.15% (D) 86.65% (E) 99.994%
  - (b) The chance that exactly one of the seven cards drawn is a heart is around:
    - (A) 0.128% (B) 13.35% (C) 31.15% (D) 86.65% (E) 99.994%
- 4. A box has five tickets:

Five draws are going to be made at random with replacement from this box.

- (a) Find the chance that 2 is drawn at least once.
  (A) 1%
  (B) 8%
  (C) 26%
  (D) 92%
  (E) 99%
- (b) Find the chance that 2 is drawn exactly once. (A) 1% (B) 8% (C) 26% (D) 92% (E) 99%
- (c) Find the chance that 2 is drawn exactly twice.
  (A) 23.04% (B) 25.929 % (C) 28.8% (D) 34.56% (E) 80%