Practice for Quiz 4

(The Quiz will be on Tuedsay, October 24)

Math 125 *Kovitz* Fall 2023

(In each part, use the regular Multiplication Rule or the Special Case of the Multiplication rule for Independent Events, whichever seems appropriate. Give the answer as an exact fraction or as a rounded-off percent.)

A deck has 13 diamonds and 39 other cards, 13 diamonds out of 52 cards.

Three cards are drawn at random.

Find the chance that all three cards drawn are diamonds if the draws are made:

(a) with replacement. (exact fraction preferred)

(b) without replacement. (exact fraction after cancellation is preferred)

The answers may be found on the following page.

Answers.

(a) 1/64. (or 0.015625, or 1.5625%)

(B) 11/850. (or 0.01294, or 1.294%)