EXIT TICKET

Question 1

A jar contains 20 tokens, 2 red, 8 yellow, 4 green, and 6 blue. What is the probability of randomly selecting 1 token that is not yellow?

(A) $\frac{1}{20}$

(B) $\frac{1}{8}$

(C) $\frac{3}{5}$

(D) $\frac{2}{3}$

Question 2

A bag contains 8 blue marbles, 5 green marbles, and 9 purple marbles. How many additional blue marbles must be added to the 22 marbles already in the bag so that the probability of randomly drawing a blue marble is $\frac{3}{5}$?

(F) 8

(G) 13

(H) 22

(J) 28

Question 3

The probability of Event R will occur is 0.4. The probability that Event T will occur is 0.5. Given that Events R and T are mutually exclusive, what is the probability that Event R *or* Event T will occur?

(A) 0.1

(B) 0.2

(C) 0.4

(D) 0.9

Question 4

A 52-card deck contains 4 suits: 13 hearts, 13 diamonds, 13 clubs, and 13 spades. Which of the following expressions gives the probability of drawing, at random and without replacement, a heart on the 1st draw, a club on the 2nd draw, and a heart on the third draw?

(F) $\left(\frac{13}{52}\right)\left(\frac{13}{52}\right)\left(\frac{12}{52}\right)$

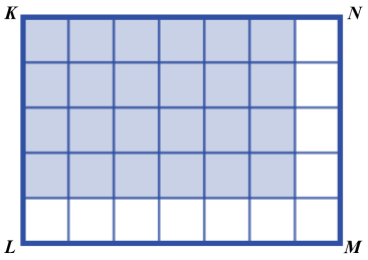
(G) $\left(\frac{13}{52}\right)\left(\frac{13}{51}\right)\left(\frac{12}{50}\right)$

(H) $\left(\frac{13}{52}\right)\left(\frac{13}{52}\right)\left(\frac{13}{52}\right)$

(J) $\left(\frac{13}{52}\right)\left(\frac{13}{51}\right)\left(\frac{13}{50}\right)$

Question 5

In the figure below, all of the small squares are equal in area, and the area of rectangle $KLMN$ is 1 square unit. If a ball were thrown at rectangle $KLMN$ and all of the small squares have the same probability of being hit, what is the probability of the ball hitting the shaded region?



(A) $\frac{1}{35}$

(B) $\frac{4}{35}$

(C) $\frac{6}{35}$

(D) $\frac{24}{35}$