1

A circular racetrack is 3 miles in length and has signs posted to indicate each 1/10 mile increment. If a race car starts at a random location on the track and travels exactly one half mile, what is the probability that the car ends within a half mile of the sign indicating 2 1/2 miles?

A. 1/6
B. 3/10
C. 1/3
D. 1/2
E. 2/3

2

A certain team has 12 members, including Joey. A three-member relay team will be selected as follows: one of the 12 members is to be chosen at random to run first, one of the remaining 11 members is to be chosen at random to run second, and one of the remaining 10 members is to be chosen at random to run third. What is the probability that Joey will be chosen to run second or third?

A. 1/1,320
B. 1/132
C. 1/110
D. 1/12
E. 1/6

3

Two dice are tossed once. The probability of getting an even number at the first die or a total of 8 is

A. 1/36
B. 3/36
C. 11/36
D. 20/36
E. 23/36

4

A coin is tossed 7 times. Find the probability of getting more heads than tails in all 7 tosses?

A. 1/2
B. 63/128
C. 4/7
D. 61/256
E. 63/64

5

In the graduating class of a certain college, 48 percent of the students are male and 52 percent are female. In this class 40 percent of the male and 20 percent of the female students are 25 years old or older. If one student in the class is randomly selected, approximately what is the probability that he or she will be less than 25 years old?

A. 0.9
B. 0.7
C. 0.45
D. 0.3
E. 0.25