

Evaluate: Probability

1. The probability of selecting a blue tile from the first bag is $\frac{1}{8}$. The probability of selecting a blue tile from the second bag is $\frac{1}{6}$. If one tile is selected from each bag, what is the probability of selecting a blue tile from the first bag, then selecting a tile other than blue from the second bag?

A $\frac{23}{24}$

B $\frac{5}{14}$

C $\frac{1}{48}$

D $\frac{5}{48}$

2. A game is played with 2 fair number cubes. One cube has faces numbered 1 through 6. The second cube is numbered 1 through 3, and each number is marked on 2 faces. If both cubes are tossed, what is the probability of rolling a 2 on the first cube and a 3 on the second cube?

A $\frac{1}{36}$

B $\frac{1}{18}$

C $\frac{1}{4}$

D $\frac{1}{2}$