

# Practice Questions

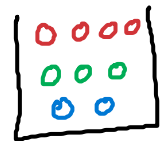
HH (TT) HT TH

- 2/3 ✓ 1. A box contains 4 red, 3 green, and 2 blue balls. One ball is picked at random.  
What is the probability that the ball is **not green**?

$$P(H_a) = 1 - P(H_{no}) \\ = 1 - \frac{1}{4} \\ = \frac{3}{4}$$

- 3/4 ✓ 2. Two coins are tossed. What is the probability of getting at least one head?

- 1/2 ✓ 3. A number is chosen at random from the set {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}.  
What is the probability that the number is a **multiple of 3 or 5**?



- 9/25 ✓ 4. A bag contains 6 white and 4 black balls. Two balls are drawn with replacement.

What is the probability that **both** are white?

$$\frac{3}{5} \times \frac{6}{10} \\ = \frac{9}{25}$$

$$P(G) = \frac{3}{9} = \frac{1}{3} \\ P(G^c) = \frac{2}{3}$$

- 3/10 ✓ 5. A student knows the answer to 70% of the questions on a test.  
If one question is selected at random, what is the probability that the student **doesn't know** the answer?

$$P(\text{known}) = 0.7 \\ P(\text{not known}) = 1 - 0.7 \\ = 0.3$$