

Section 15-3: Evaluating Simple Probabilities

1. 060415a, P.I. A.S.20

Mary chooses an integer at random from 1 to 6. What is the probability that the integer she chooses is a prime number?

- [A] $\frac{3}{6}$ [B] $\frac{5}{6}$ [C] $\frac{2}{6}$ [D] $\frac{4}{6}$

2. 080011a, P.I. A.S.20

A box contains six black balls and four white balls. What is the probability of selecting a black ball at random from the box?

- [A] $\frac{4}{6}$ [B] $\frac{1}{10}$ [C] $\frac{6}{10}$ [D] $\frac{6}{4}$

3. 060705a, P.I. A.S.20

A six-sided number cube has faces with the numbers 1 through 6 marked on it. What is the probability that a number less than 3 will occur on one toss of the number cube?

- [A] $\frac{2}{6}$ [B] $\frac{1}{6}$ [C] $\frac{4}{6}$ [D] $\frac{3}{6}$

The Impossible Case

4. 010811a, P.I. A.S.20

Which event has a probability of zero?

- [A] choosing a triangle that is both isosceles and right
[B] choosing a number that is greater than 6 and is even
[C] choosing a letter from the alphabet that has line symmetry
[D] choosing a pair of parallel lines that have unequal slopes

The Probability of Any Event

5. 060630a, P.I. A.S.20

Which inequality represents the probability, x , of any event happening?

- [A] $0 \leq x \leq 1$ [B] $x \geq 0$
[C] $0 < x < 1$ [D] $x < 1$

[1] A

[2] C

[3] A

[4] D

[5] A