

- 1) A fair coin is tossed four times. What is the probability that the sequence of tosses is HHHT? 1) _____
A) 0.0625 B) 0.25 C) 0.038 D) 0.125
- 2) A fair die is rolled two times. What is the probability that both rolls are 6? 2) _____
A) 0.167 B) 0.083 C) 0.0046 D) 0.028
- 3) According to popular belief, 80% of adults enjoy drinking beer. Choose a group of 2 adults at random. The probability that all of them enjoy drinking beer is _____. 3) _____
A) 0.640 B) 0.400 C) 1.600 D) 0.500
- 4) Given eight students, three of whom are female, if two students are selected at random, without replacement, what is the probability that both students are female? 4) _____
A) $\frac{5}{14}$ B) $\frac{9}{64}$ C) $\frac{3}{28}$ D) $\frac{25}{28}$
- 5) A fair die is rolled four times. What is the probability that it comes up 3 at least once? 5) _____
A) 0.5177 B) 0.1667 C) 0.8333 D) 0.4213
- 6) On an eight-question true-false quiz, a student guesses each answer. What is the probability that the student gets at least one of the answers correct? 6) _____
A) $\frac{255}{256}$ B) $\frac{1}{256}$ C) $\frac{7}{8}$ D) $\frac{1}{8}$
- 7) Urn 1 contains 4 red balls and 3 black balls. Urn 2 contains 2 red balls and 3 black balls. Urn 3 contains 2 red balls and 6 black balls. If an urn is selected at random and a ball is drawn, find the probability it will be red. 7) _____
A) $\frac{2}{5}$ B) $\frac{1}{3}$ C) $\frac{1}{105}$ D) $\frac{57}{140}$
- 8) In a second grade class containing 14 girls and 8 boys, 2 students are selected at random to give out the math papers. What is the probability that the second student chosen is a boy, given that the first one was a girl? 8) _____
A) $\frac{4}{11}$ B) $\frac{8}{21}$ C) $\frac{7}{11} \cdot \frac{2}{3}$ D) $\frac{7}{11} \cdot \frac{8}{21}$

9) The Gift Basket Store had the following premade gift baskets containing the following combinations in stock. 9) _____

	Cookies	Mugs	Candy
coffee	5	18	11
Tea	15	14	7

Choose 1 basket at random. Find the probability that it contains tea given that it contains mugs.

- A) ≈ 0.563 B) ≈ 0.200 C) ≈ 0.778 D) ≈ 0.438

10) A lot of 1000 components contains 200 that are defective. Two components are drawn at random and tested. Let A be the event that the first component drawn is defective, and let B be the event that the second component drawn is defective. 10) _____

Find $P(A \text{ and } B)$.

- A) 0.005 B) 0.1992 C) 0.0398 D) 0.2

Answer Key

Testname: PRACTICE10

- 1) A
- 2) D
- 3) A
- 4) C
- 5) A
- 6) A
- 7) D
- 8) B
- 9) D
- 10) C