

COMPOUND PROBABILITY

10. A bag contains 16 marbles. Four are red, ten are blue, and 2 are green. What is the probability of randomly drawing two blue marbles from the bag without replacement?

A. $\frac{3}{5}$	B. $\frac{1}{2}$
C. $\frac{3}{8}$	D. $\frac{45}{128}$

11. A bag contains 16 marbles. Four are red, ten are blue, and 2 are green. Find the probability of randomly drawing a red marble and then a green marble from the bag without replacement.

A. $\frac{1}{32}$	B. $\frac{1}{30}$
C. $\frac{3}{64}$	D. $\frac{3}{8}$

12. A bag contains 16 marbles. Four are red, ten are blue, and 2 are green. Find the probability of randomly drawing a blue marble and then a green marble from the bag without replacement.

A. $\frac{1}{8}$	B. $\frac{3}{7}$
C. $\frac{2}{5}$	D. $\frac{1}{12}$

13. A bag contains 16 marbles. Four are red, ten are blue, and 2 are green. Find the probability of randomly drawing two red marbles from the bag without replacement.

A. $\frac{1}{20}$	B. $\frac{7}{15}$
C. $\frac{7}{20}$	D. $\frac{3}{20}$

14. A bag contains 6 purple jacks and 8 yellow jacks. Sarah randomly selects two jacks from the bag without replacing them. If the first two she picked were purple, what is the probability that the next one she chooses will be purple?

A. $\frac{1}{3}$	B. $\frac{1}{2}$
C. $\frac{2}{3}$	D. $\frac{3}{4}$

15. A bag contains 6 purple jacks and 8 yellow jacks. Sarah randomly selects two jacks from the bag without replacing them. If the first two she picked were purple, what is the probability that the next one she chooses will be yellow?

A. $\frac{1}{3}$	B. $\frac{1}{2}$
C. $\frac{2}{3}$	D. $\frac{3}{4}$

16. A box contains 10 chocolate chip cookies and 8 sugar cookies. What is the probability of selecting one chocolate chip cookie, eating it (without replacement), and then selecting a sugar cookie?

A. 12.3%	B. 26.1%
C. 32.7%	D. 42.5%

17. Using the same box above (containing the original 18 cookies), find the probability of selecting two chocolate chip cookies without replacement.

A. 13.2%	B. 15%
C. 25.3%	D. 29.4%

18. Using the same box above (containing the original 18 cookies), find the probability of selecting two sugar cookies without replacement.

A. 18.3%	B. 20%
C. 26.2%	D. 33.3%

19. Two coins are flipped. What is the probability that they are both tails?

A. 0.25	B. 0.5
C. 0.75	D. 1