

Probability of Dependent Events

Find the probability of the dependents events

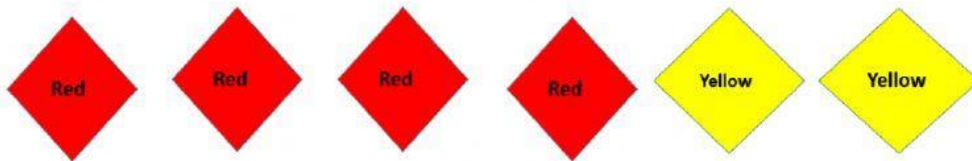
A jar contains 4 blue and 5 white marbles. What is the probability of picking a blue marble without replacing it, select another blue card. What is the probability?

$$P(\text{blue, then blue}) = P(\text{blue}) \times P(\text{blue})$$

$$\frac{4}{9} \times \frac{3}{8} = \frac{12}{72} \text{ or } \frac{1}{6}$$

Select one card at random. Without replacing the card, select a second card.

Find the probabilities,



1. P(red, then yellow) = _____

2. P (yellow, then red) = _____

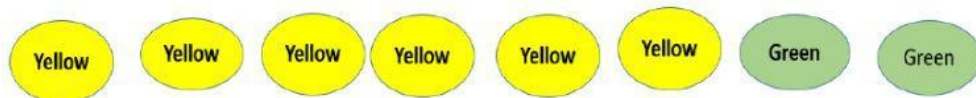
3. P(red, then red) = _____

4. P(yellow, then yellow) = _____

5.(Red, black) = _____

6. P(yellow, white) = _____

A jar contains these balls. Select one ball at random. Without replacing the ball, select a second ball. Find the probabilities.



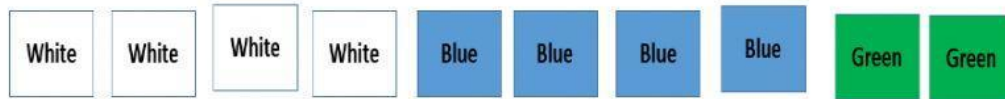
7. P(yellow, then yellow) = _____

8. P(yellow, then green) = _____

9. P(green, then yellow) = _____

10. P(green, then green) = _____

Select a card at random. Without replacing the card, select a second card. Find the probabilities,



11. $P(\text{white, white}) =$ _____

12. $P(\text{blue, green}) =$ _____

13. $P(\text{blue, blue}) =$ _____

14. $P(\text{white, green}) =$ _____

15. $P(\text{green, purple}) =$ _____

16. $P(\text{green, red}) =$ _____