

Given the set of cards shown above, Find:

$$P(7 \text{ or face card}) =$$

$$P(\text{diamond or face card}) =$$

$$P(X \text{ or } Y) = P(X) + P(Y) - P(X \text{ and } Y)$$

Events that are **mutually exclusive** cannot occur at the same time. In these cases, $P(X \text{ and } Y) = 0$ and the probability equation above simplifies to $P(X \text{ or } Y) = P(X) + P(Y)$.

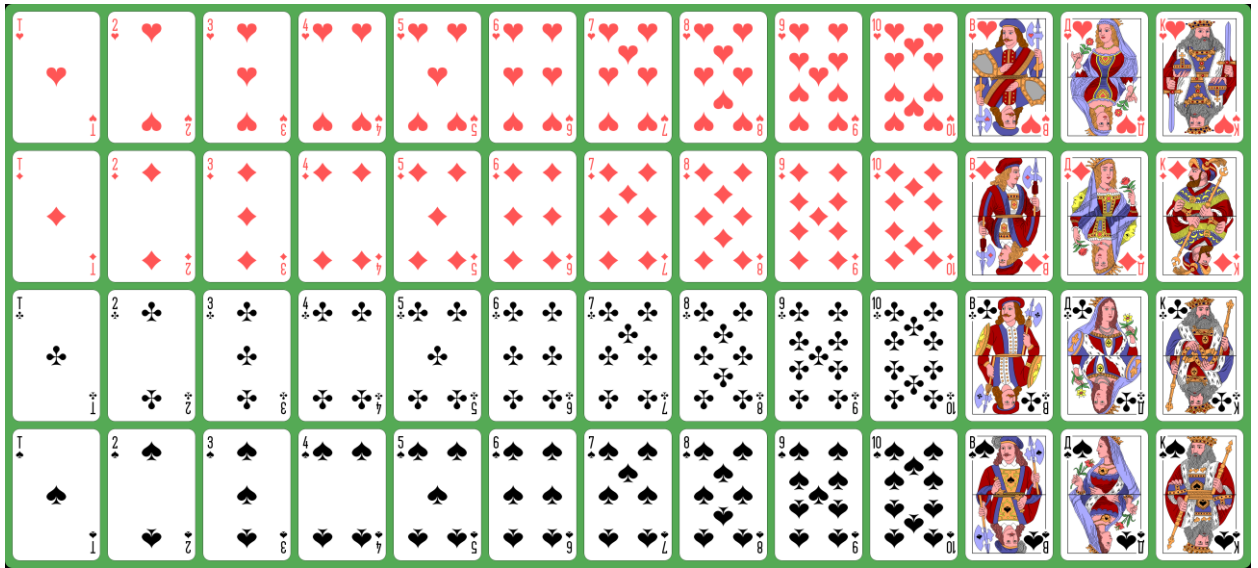
A bowl contains 13 blue, 11 yellow, 14 red, and 12 green marbles.

1) Find $P(\text{blue or yellow})$

2) Find $P(\text{red or green})$

3) Find $P(\text{yellow or green or blue})$

Find each probability below from a standard deck of playing cards.



4) $P(\text{ace or red})$

5) $P(\text{queen or heart})$

6) $P(\text{face card or spade})$

7) $P(\text{single digit prime number or red})$

8) $P(8 \text{ or King or black})$

9) $P(\text{diamond or red})$

10) $P(\text{black or club})$