

# EE23010 NCERT Exemplar

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## Question 10.13.3.29

Refer to Q.28. What is the probability that the card is

- (i) a club
- (ii) 10 of hearts

### Solution:

Total number of cards left

$$52 - 3 = 49 \quad (1)$$

- (i) A club

Total number of club cards

$$13 \times 1 = 13 \quad (2)$$

The king, queen and jack of clubs are removed.  
Hence total number of club cards left

$$13 - 3 = 10 \quad (3)$$

Let  $E_1$  = Event of getting a club

$$E_1 = 10 \quad (4)$$

$$P_r(E_1) = \frac{10}{49} \quad (5)$$

- (ii) 10 of Hearts

Let  $E_2$  = Event of getting a 10 of hearts

$$E_2 = 1 \quad (6)$$

$$P_r(E_2) = \frac{1}{49} \quad (7)$$