## Assignment NCERT Exemplar 10.13.3.21

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Question: Two dice are thrown together. Find the probability that the product of numbers on top of dice is (i) 6 (ii) 12 (iii)7

## **Solution:**

1) Let the event of getting product of numbers on top of dices is 6 be A. Since, two dice are tossed together so Total Outcome T(A)=36. Favourable Cases are (1,6) (6,1) (2,3) (3,2).

$$Favourable\ Outcomes = 4$$
 (1)

$$P(A) = \frac{4}{36}$$
 (2)  
=  $\frac{1}{9}$  (3)

$$=\frac{1}{9} \qquad (3)$$

- 2) Let the event of getting product of numbers on top of dices is 7 be B. For product of two dice to be 7. Favourable Cases are 0. Hence, P(B) = 0
- 3) Let the event of getting product of numbers on top of dices is 12 be C. Favourable Cases are (2,6) (6,2) (3,4)(4,3).

$$Favourable\ Outcomes = 4$$
 (4)

$$P(C) = \frac{4}{36}$$
 (5)  
=  $\frac{1}{9}$  (6)

$$=\frac{1}{9} \qquad (6)$$