Quiz

1. Two coins are thrown. Head is desired on exactly one

Total outcomes = 4

Favorable outcome = __2_____

2. Two coins are thrown. At least one Tail is desired

Total outcomes = 4

Favorable outcome = ___3_____

3. Two coins are thrown one after the other. Head is desired on the first as well as on the second

Total outcomes = 4

Favorable outcomes : _____1_____

4. 3 coins are thrown. Head is desired on any two.

Total outcomes = 8

Favorable outcomes = _____3_____

5. 3 coins are thrown. At least 2 heads are desired.

Total outcomes = 8

Favorable outcomes = _____4_____

6. A die is thrown. Prime number is desired

Total outcomes = 6

Favorable outcomes = _____3_____

7. Two dies are thrown. It is desired that the sum of the numbers on the two faces should be 9

Total outcomes = 36

Favorable outcomes = _____4_____

8. Two dies are thrown. It is desired that the sum of the numbers on the two faces should be at least 11

Total outcomes = 36

Favorable outcomes = _____3_____

9. Two dies are thrown one after the other. Even number is desired on the first one and odd number on the second.

Total outcomes = 36

Favorable outcomes : _____9_____

10. 3 dies are thrown. Even number is desired on all 3.

Total outcomes = 216

Favorable outcomes = _____3x3x3_____

11. Three dies are thrown. It is desired that at the most two two faces should bear a 5

Total outcomes = 216

Favorable outcomes = _____

atmost 2 faces should bear a 5

means: (no face should bear a 5) OR (exactly 1 face should bear a 5) OR (exactly 2 faces should bear a 5)

= 5^3 + 3 x 5^2 + 3 x 5

- (no face should bear a 5) : 5 x 5 x 5 = 5^3

- (exactly 1 faces should bear a 5) : (die 1 should have 5) AND (die 2, die 3 should not bear 5)

OR

(die 2 should have 5) AND (die 1, die 3 should not bear 5)

OR

(die 3 should have 5) AND (die 1, die 2 should not bear 5)

(1 x 5 x 5) + (1 x 5 x 5) + (1 x 5 x 5) (note OR becomes + and AND becomes X)

= 3 x 5^2

- (exactly 2 faces should bear a 5) : (1 x 1 x 5) + (1 x 1 x 5) + (1 x 1 x 5)

= 3 x 5