

## PROBABILITY

A. Watch the video bellow!

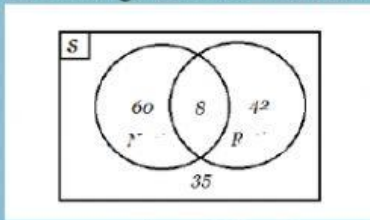


B. Multiple Choice

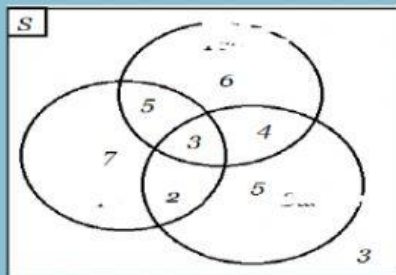
1. There is a dice and then thrown once, determine the chance of the appearance of the dice eye 6!  
a. 6  
b. 12  
c.  $\frac{1}{6}$   
d. 1
2. A pouch consists of 4 red marbles, 3 blue marbles, and 5 green marbles. From the marbles, one marble will be taken. Determine the chances of taking the blue marbles!  
a. 12  
b.  $\frac{1}{4}$   
c.  $\frac{1}{12}$   
d. 1
3. Two coins were thrown at the same time. Determine the chances of appearing both numbers!  
a.  $\frac{1}{4}$   
b.  $\frac{1}{2}$   
c. 1  
d. 2
4. In a box there are 7 red marbles and 3 blue mussels. Chance of taking 3 red marbles at once?  
a.  $\frac{3}{10}$   
b.  $\frac{1}{4}$   
c.  $\frac{7}{24}$   
d.  $\frac{3}{7}$
5. in a pocket there are 7 red marbles and 4 white marbles. 4 marbles will be taken at once. The odds of 2 red marbles and 2 white marbles are?  
a.  $\frac{126}{330}$   
b.  $\frac{116}{330}$   
c.  $\frac{53}{330}$   
d.  $\frac{27}{330}$

C. Short Filling

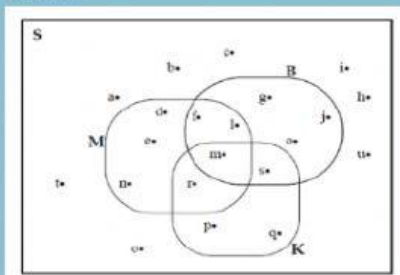
6. Physical fitness data were obtained: 68 running, 50 swimming, 8 running and swimming, while 35 were not both. How many people are in the group?




7. survey results of 35 students. 18 like mathematics, 17 like science, 14 like social studies, 8 like math and science, 5 like science and ips, 3 like everything. How many don't like these three?




D. Match



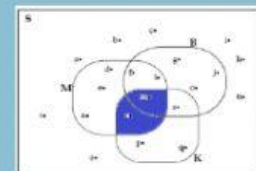
Suppose S = Set of students in your class

M= Set of students who love math

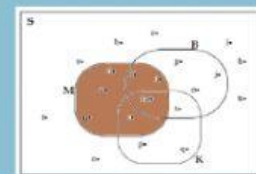
B = Set of English-loving students

K = Set of students who love the arts

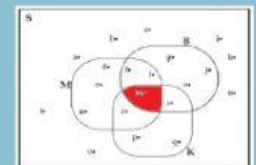
8.



How many students like math?



How many students like math and the arts?



How many students like all three?

9. Match Formula

Factorial

=

Permutation

=

cyclical permutations

=

combination

=

probability

=

Odds of Two Events

=

$$P(A) = \frac{n(A)}{n(S)}$$

$$P = (A \cap B) = P(A) \times P(B)$$

$$P = (n-1)!$$

$$C_{(n,r)} = \frac{n!}{r!(n-r)!}$$

$$P_{(n,r)} = \frac{n!}{(n-r)!}$$

$$P = \frac{n!}{a! \times b! \times c! \dots}$$

10.

$$\frac{11 \times 10 \times 9 \times 8 \times 7!}{4 \times 3 \times 2 \times 1 \times 7!} =$$

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