



**Q1/** Six cards are drawn from a pack of playing cards. Find the probability of :  
**(1) four** are aces and **two** are queen? **(2) three** are **black numbers** and other are  
**read picture?**

**Q2/** Three unbiased dice are thrown write only the columns of **sum** and  
**frequency** then find the probability of :

**1-** Sum of three dice **less than 9?** **2-** Sum of three dice **equal to 15?**

**Q3/** A school employ **75** teachers. The following table summarizes their length of  
service at the school, classified by gender.

	Less than 3 years	3 years to 8 years	More than 8 years	Total
Female	12	20	13	45
Male	8	15	7	30
Total	20	35	20	75

If a teacher is selected at random find probability of :

1- the teacher is a female.

2- the teacher is female, **given that** the teacher has **More than 8 years** service.

**Q4/** Urn A contains **7** red marbles and **5** blue marbles, and **urn B** contains **4** red  
marbles and **6** blue marbles. **(1)** If a **marble** is drawn from **each urn**, what is the  
probability that they are **both of the same color?** **(2)** If **two marbles** are drawn  
from **each urn**, what is the probability that all **four marbles** are of the same  
color? **(3)** If we select a **Urn** at random and then draw a marble at random.  
What is the probability that a marble is a **red?**

**Good Luck**

Name

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