In a MCQ a student randomly guesses from the options if she does not know. Given that there were $[m]$ choices in a question and that $[p]$ is the chance she knows the answer, what is the probability that she knew the answer if she answered correctly?

(A) $\frac{[m*p]}{[1+m*p]}$

(B) $\frac{1}{[1+(m-1)*p]}$

(C) $\frac{1}{[1+m*p]}$

(D) **[Ans]** $\frac{[m*p]}{[1+(m-1)*p]}$

Bag I contain $[w_1]$ white and $[b_1]$ black balls. Bag II contains $[w_2]$ white and $[b_2]$ black balls.

A ball is drawn at random from one of the bags, and it is found to be white. What is the probability that it was drawn from Bag I.

(A) $\frac{[w_1]}{[w_1+b_1]}$

(B) $\frac{[w_1*(w_1+b_1)]}{[w_1*(w_1+b_1)+w_2*(w_2+b_2)]}$

(C) $\frac{[w_1*(b_1+b_2)]}{[w_1*(b_1+b_2)+w_2*(b_1+b_2)]}$

(D) **[Ans]** $\frac{[w_1*(w_2+b_2)]}{[w_1*(w_2+b_2)+w_2*(w_1+b_1)]}$

A man is known to speak truth $[K]$ out of 10 times. He throws a die and reports that number obtained is a four. Find the probability that the number obtained is actually a four.

(A) $\frac{1}{6}$

(B) $\frac{[K]}{[60-5*K]}$

(C) $\frac{[K]}{[40-3*K]}$

(D) **[Ans]** $\frac{[K]}{[50-4*K]}$

Given the following confusion matrix what is the precision?

	Predicted +ve	Predicted -ve
Actual +ve	[A]	[B]
Actual -ve	[C]	[D]

(A) $\frac{[A]}{[A+B]}$

(B) **[Ans]** $\frac{[A]}{[A+C]}$

(C) $\frac{[A+D]}{[A+B+C+D]}$

(D) $\frac{[D]}{[D+C]}$

Consider that numbers from 1 to $[N**2]$ are arranged in a $[N]$ by $[N]$ dimensional square matrix M in a way such that first $[N]$ numbers are in row 1, next $[N]$ numbers in row 2 and so on. The rank of M is

(A) 1

(B) **[Ans]** 2

(C) $[N]$

(D) None of these