Q.1) Find matrix X if Y = and 2X + Y =

Q.2) If A = and B = find matrix X such that A + 3B + X is a unit matrix.

Q.3) If A = , show that A2 = 0.

Q.4) Show that the matrix A = satisfies the equation A2 – 8A + 7I = 0. Hence find A-1.

Q.5) Expand following determinants to find the value:



Q.6) Solve using Cramer’s rule :

1. 5x + 2y = 9, 8x – y = 6.
2. 3x + 3y – z = 11, 2x – y + 2z = 9, 4x + 3y + 2z = 25.

Q.7) Express A as sum of symmetric and skew symmetric matrices :

A =

Q.8) Find rank of following matrices by reducing to row echelon form :

i. ii.

-----------------------x-----------------------