Handout 3 : Brady Bunch
Answers

1. Find D: $\begin{vmatrix} 4 & 6 & -2 \\ 0 & -1 & 5 \\ -3 & 2 & 1 \end{vmatrix}$

   Ans: -128

2. Express these as a matrix: $3x - 2y + 5z = 6, 2x+y-4z = 8, -x+4y+6z = 9$.

   Ans: $\begin{bmatrix} 3x & -2y & 5z \\ 2x & 1y & -4z \\ -1x & 4y & 6z \end{bmatrix} = \begin{bmatrix} 6 \\ 8 \\ 9 \end{bmatrix}$

3. Create coefficient matrix from Question 2.

   Ans: $\begin{bmatrix} 3 & -2 & 5 \\ 2 & 1 & -4 \\ -1 & 4 & 6 \end{bmatrix}$

4. Solve Question 3 for D.

   Ans: 127

5. Find D_x with Question 2's equations.

   Ans: 415

6. Solve Question 2's equations for x.

   Ans: $\frac{415}{127}$

7. Find D_y with Question 2's equations.

   Ans: 334

8. Solve Question 2's equations for y.

   Ans: $\frac{334}{127}$

9. Find D_z with Question 2's equations.

   Ans: 37

10. Solve Question 2's equations for z.

    Ans: $\frac{37}{127}$