

Check for consistency and solve the following system of equations if consistent.

i)

$$X_1 + X_2 + X_3 + X_4 = 4$$

$$2X_1 + 3X_2 + 3X_3 - X_4 = 3$$

$$5X_1 + 7X_2 + 4X_3 + X_4 = 5$$

ii)

$$X_1 + 2X_2 + X_3 = 3$$

$$2X_1 + 5X_2 - X_3 = -4$$

$$3X_1 - 2X_2 - X_3 = 5$$

iii)

$$2x - 3y + 2z = 1$$

$$5x - 8y + 7z = 1$$

$$y - 4z = 3$$