

10 Extension Questions

1.
$$\begin{aligned}-x + 5y + 6z &= -44 \\ 2x + 3y + 5z &= -13 \\ -x - 6y - 6z &= 20\end{aligned}$$

2.
$$\begin{aligned}-5x + 6y + z &= -68 \\ 7x + 6y &= -139 \\ 3x - 4y - 2z &= 65\end{aligned}$$

3.
$$\begin{aligned}-x - 4y - 2z &= -27 \\ 5x + 6y + 4z &= 23 \\ 6x + 7y - 4z &= 26\end{aligned}$$

4.
$$\begin{aligned}-2x + y + z &= 18 \\ 3x - 5y + z &= -30 \\ -6x + 7z &= 70\end{aligned}$$

5.
$$\begin{aligned}3x + 3y + z &= 1 \\ 7x + 3z &= -17 \\ -5x - 6y + 6z &= 94\end{aligned}$$

6.
$$\begin{aligned}-5x + 2y + 2z &= -7 \\ 7x - 3y + 4z &= -92 \\ 3x + 2y + z &= -32\end{aligned}$$

7.
$$\begin{aligned}-3x - z &= -35 \\ -5x + 3y - 3z &= -45 \\ -2x + 2y - 5z &= -42\end{aligned}$$

8.
$$\begin{aligned}5x + 6y + 4z &= -66 \\ -2x - 6y + 7z &= 2 \\ -3x + 3y - 4z &= 56\end{aligned}$$

9.
$$\begin{aligned}-6x - 2y + 3z &= 129 \\ -4x + y + z &= 42 \\ 4x + 3y + 2z &= -75\end{aligned}$$

10.
$$\begin{aligned}+3y - 3z &= 21 \\ x + y + 7z &= -51 \\ -2x + 5y - z &= -29\end{aligned}$$

1. $x = 10, y = 4, z = -9$

6. $x = -5, y = -1, z = -15$

2. $x = -7, y = -15, z = -13$

7. $x = 9, y = 8, z = 8$

3. $x = -5, y = 8, z = 0$

8. $x = -14, y = 2, z = -2$

4. $x = 0, y = 8, z = 10$

9. $x = -12, y = -15, z = 9$

5. $x = -8, y = 4, z = 13$

10. $x = 14, y = -2, z = -9$