c.) $x - 6y + 2z = 0$

$2x - 8y + 10z = 4$

$3x - 4y - z = 2$

eliminate x;

$(2x - 8y + 10z) - 2(x - 6y + 2z) = 4 - 0$

left side;

$2x - 8y + 10z - 2x + 12y - 4z = 4y + 6z$

So,

$4y + 6z = 4$

$2y + 3z = 2$

Compute;

$(3x - 4y - z) - 3(x - 6y + 2z) = 2 - 0$

left side;

$3x - 4y - z - 3x + 18y - 6z = 14y - 7z$

So,

$14y - 7z = 2$

$2y - z = \frac{2}{7}$

Solve;

$2y + 3z = 2$

$2y - z = \frac{2}{7}$

Subtract the second from the first

$(2y + 3z) - (2y - z) = 2 - \frac{2}{7}$

$4z = \frac{12}{7}$

$z = \frac{3}{7}$

Then from $2y - z = \frac{2}{7}$

$2y - \frac{3}{7} = \frac{2}{7}$

$2y = \frac{5}{7}$

$y = \frac{5}{14}$

find x;

$x - 6(\frac{5}{14}) + 2(\frac{3}{7}) = 0$

Compute;

$x - \frac{15}{7} + \frac{6}{7} = 0$

$x = \frac{9}{7}$

$x = \frac{9}{7}$, $y = \frac{5}{14}$, $z = \frac{3}{7}$