

$$(1) \quad 2x - y + 5z = -7$$

$$(2) \quad x + 4y - 2z = 1$$

$$(4) \quad 2x - y + 5z = -7$$

$$(4) = -2(2) \quad -2x - 8y + 4z = -2$$

$$(5) \quad -9y + 9z = -9$$

$$(2) \quad x + 4y - 2z = 1$$

$$(3) \quad 3x + 2y + z = -7$$

$$(6) = -3(2) \quad -3x - 12y + 6z = -3$$

$$(6) + (3) \quad 3x + 2y + z = -7$$

$$(7) = (6) + (3) \quad -10y + 7z = -10$$

$$(5) \quad -9y + 9z = -9$$

$$(7) \quad -10y + 7z = -10$$

$$(8) = 10(5) \quad -90y + 90z = -90$$

$$(9) = -9(7) \quad 90y - 63z = 90$$

$$(10) = (8) + (9) \quad 17z = 0$$

$$\boxed{z = 0}$$

$$\rightarrow (5) \quad -9y + 9 \cdot 0 = -9$$

$$-9y = -9$$

$$\boxed{y = 1}$$

Check

$$(1) \quad 2(-3) - 1 + 0 \stackrel{?}{=} -7$$

$$-6 - 1 \stackrel{\checkmark}{=} -7$$

$$(2) \quad -3 + 4(1) \stackrel{?}{=} 1$$

$$-3 + 4 \stackrel{\checkmark}{=} 1$$

$$(5) \quad 3(-3) + 2(1) \stackrel{?}{=} -7$$

$$-9 + 2 \stackrel{\checkmark}{=} -7$$

Solution
 $(-3, 1, 0)$

$$(2) \quad x + 4y - 2z = 1$$

$$x + 4(1) - 2(0) = 1$$

$$x + 4 = 1$$

$$\begin{matrix} -4 & -4 \\ \hline x = -3 \end{matrix}$$

