

(2b. contd)

$$(4) \times 3 \quad 15y - 36z = 9$$

$$(5) \times 5 \quad 15y + 5z = 25$$

$$-41z = -16$$

$$z = \frac{16}{41}$$

$$(4) \quad 5y - 12z = 3$$

$$5y - 12\left(\frac{16}{41}\right) = 3$$

$$5y - \frac{192}{41} = 3$$

$$5y = \frac{315}{41}$$

$$y = \frac{63}{41}$$

check (3) $-4x - y + 3z = 1$

$$-\left(\frac{-6}{41}\right) - \frac{63}{41} + 3\left(\frac{16}{41}\right) = 1 \quad \times$$

(1)

$$\therefore x + y - z = 1$$

$$x + \frac{63}{41} - \frac{16}{41} = 1$$

$$x + \frac{47}{41} = 1$$

$$x = \frac{-6}{41}$$