

1 Find x, y and z such that $(x - y, x + y, z - 1) = (4, 2, 3)$

$$\begin{cases} x - y = 4 \\ x + y = 2 \\ z - 1 = 3 \end{cases}$$

$$\begin{cases} x = 4 + y \\ y + 4 + y = 2 \\ z = 4 \end{cases} \quad (1)$$

$$\begin{cases} x = 4 + y \\ y = -1 \\ z = 4 \end{cases}$$

$$\begin{cases} x = 3 \\ y = -1 \\ z = 4 \end{cases}$$

$$\implies (x - y, x + y, z - 1) = (4, 2, 3), x = 3, y = -1, z = 4$$