

C1)

$$(1 - z)x + zy = 1$$

$$(z - 1)x + zy = 0$$

$$x - zx + zx - x + 2zy = 1$$

$$y = \frac{1}{2z}$$

$$x - zx + zy = 1$$

$$x - zx + \frac{1}{2} = 1$$

$$x - zx = \frac{1}{2}$$

$$x = \frac{1}{2(1-z)}$$

$$(x, y) = \left(\frac{1}{2(1-z)}, \frac{1}{2z} \right)$$

C2)

$$ad = bc$$

$$\text{I} \quad ax + by = 0$$

$$\text{II} \quad cx + dy = 0$$

$$a = \frac{bc}{d}$$

$$\text{I} \quad \frac{bc}{d}x + by = 0$$

$$\text{I} \quad y = -\frac{c}{d}x$$

$$x = 1 \rightarrow y = -\frac{c}{d}$$

$$(x, y) = (1, -\frac{c}{d})$$
