

Symmetricality

Q1.

Equation Number

$$b+c+d+e=4 \quad (1)$$

$$a+c+d+e=5 \quad (2)$$

$$a+b+d+e=1 \quad (3)$$

$$a+b+c+e=2 \quad (4)$$

$$a+b+c+d=0 \quad (5)$$

$$4(a+b+c+d+e)=12$$

Add all equations together

$$\therefore 12 \div 4 = (a+b+c+d+e)$$

$$(a+b+c+d+e) = 3 \quad (6)$$

By Elimination:

$$\text{eq}^n (6) - \text{eq}^n (1): \quad a = 3 - 4$$

$$a = -1$$

$$\text{eq}^n (6) - \text{eq}^n (2): \quad b = 3 - 5$$

$$b = -2$$

$$\text{eq}^n (6) - \text{eq}^n (3): \quad c = 3 - 1$$

$$c = 2$$

$$\text{eq}^n (6) - \text{eq}^n (4): \quad d = 3 - 2$$

$$d = 1$$

$$\text{eq}^n (6) - \text{eq}^n (5): \quad e = 3 - 0$$

$$e = 3$$