

**Answer on Question #85717 – Math – Other**

**Question**

Solve the following LPP by two phase simplex method:

$$\text{Maximize } Z = X + 2Y + 3Z$$

$$\text{Subject to } X + 2Y + 3Z = 15$$

$$2X + Y + 5Y = 20$$

$$X + 2Y + Z + W = 10$$

$$X, Y, Z, W \geq 0$$

**Solution**

$$\text{Maximize } Z = X + 2Y + 3Z$$

$$\text{Subject to } X + 2Y + 3Z = 15$$

$$\text{Then } Z = X + 2Y + 3Z = 15$$

$$X + 2Y = 15 - 3Z = 15 - 3(15) = -30 < 0$$

$$\text{But } X, Y, Z, W \geq 0$$

There is no solution.

**Answer:** There is no solution.