



Sorted order - same.

Item	w_i	v_i	$P_i = \frac{v_i}{w_i}$
x_1	3	45	15
x_2	5	30	6
x_3	9	45	5
x_4	5	10	2

Using fractional knapsack, max val = ?

$$x_1 + x_2 + x_3$$

$$w = 3 + 5 + 8 = 16$$

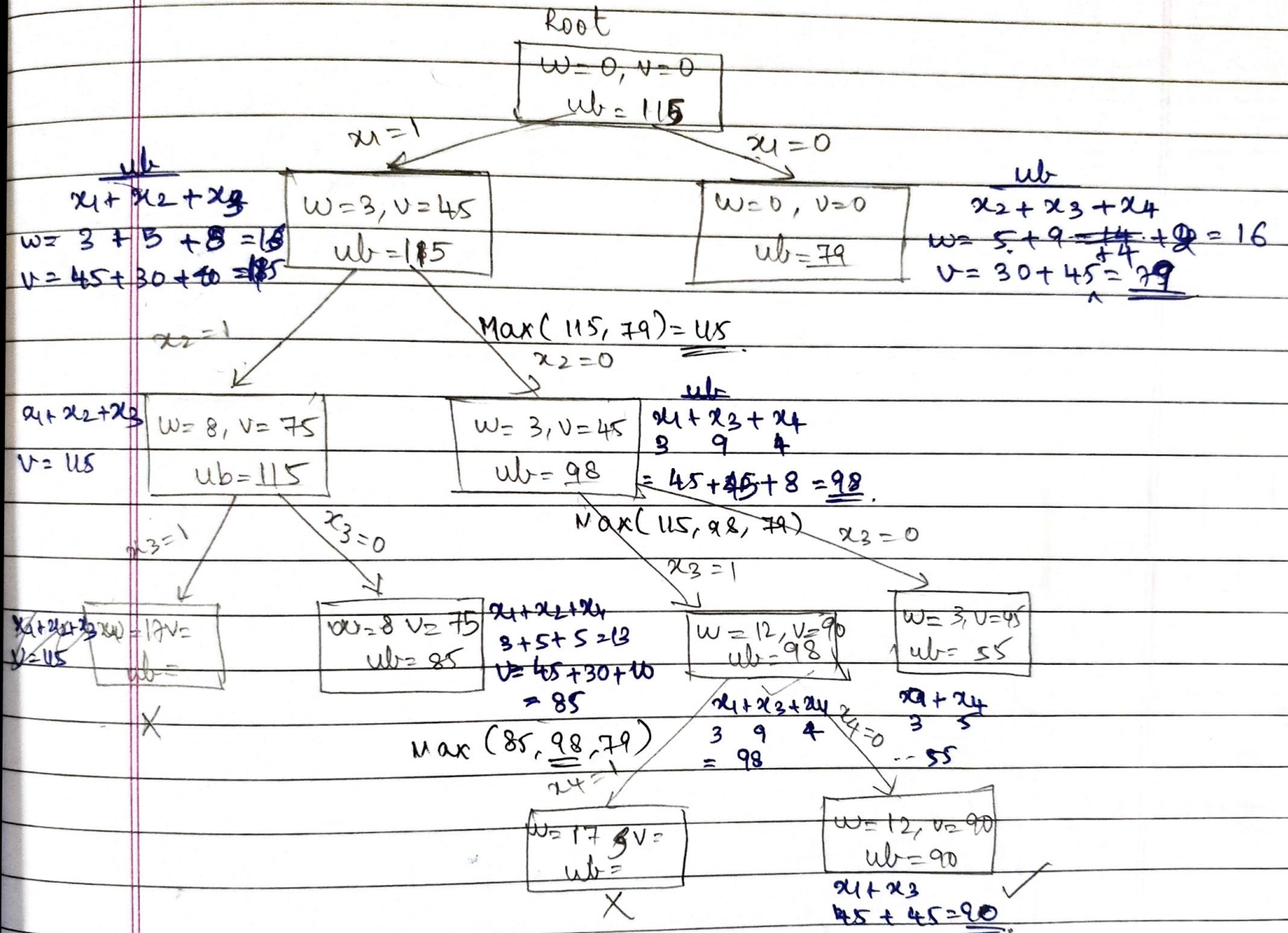
$$v = 45 + 30 + 8 \times 5 = 110$$

$$45$$

$$30$$

$$40$$

$$115$$

2. Upper bound $ub = 115$ 

$\therefore \text{Soln} = \underline{\underline{\langle 1, 0, 1, 0 \rangle}}$