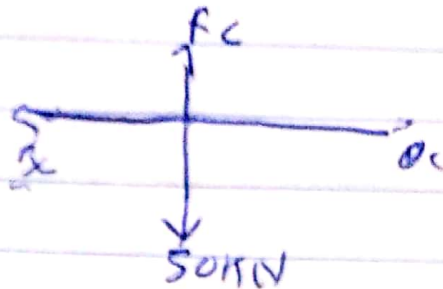


Idowu Oregoke
 17/eng 03/025
 CE 304
 Assignment

At joint C



From previous calculated example
 $BC = 50 \text{ kN}$

$$\therefore -BC + DC = 0 \quad (\text{Resolving horizontally})$$

$$-50 + DC = 0$$

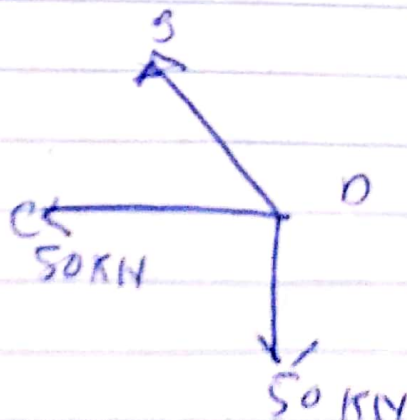
$$DC = 50 \text{ kN (compression)}$$

Resolving to vertical

$$-50 \text{ kN} + FC = 0$$

$$FC = 50 \text{ kN (tension)}$$

At joint D



$$\text{Resolving to horizontal } FC = -50 \text{ kN} - DE \cos 45 = 0$$

$$50 \text{ kN} = -DE \cos 45$$

$$DE = 70.7 \text{ (compression)}$$