

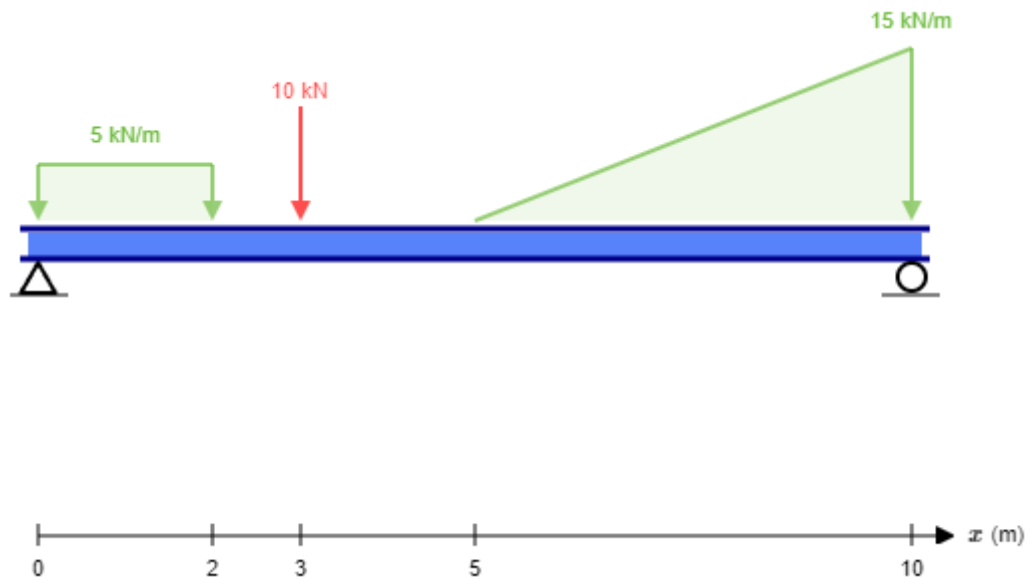
1) Find the angles and magnitude of the following vector $A = (50, -70, 64)$

2) Find the cross and dot product of the following two vectors.

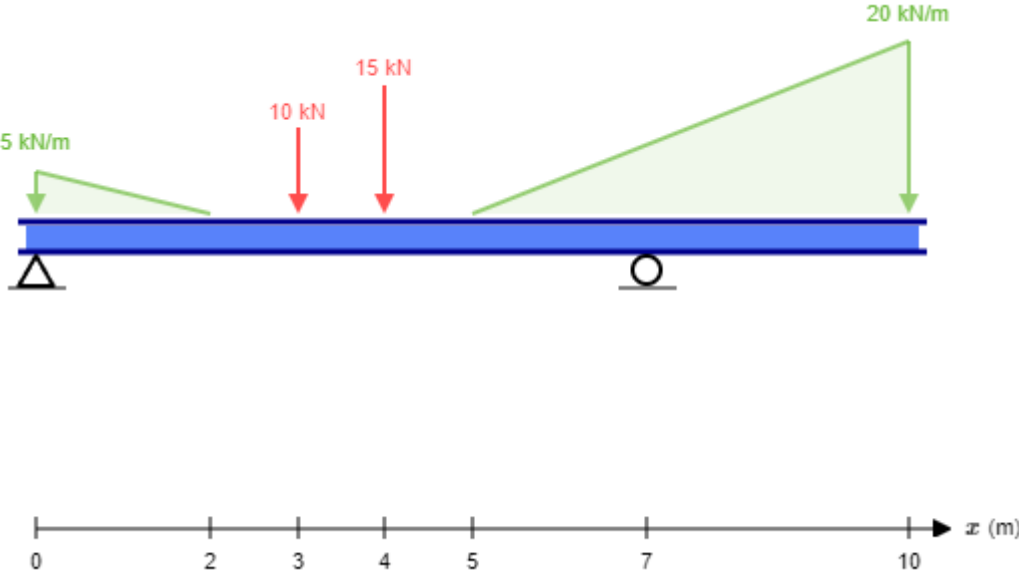
$$A = (4, 2, -3) \quad B = (-5, 9, 3)$$

3) Find the angle between the two given vectors $A = (13, 7, -7)$ $B = (7, -6, 3)$

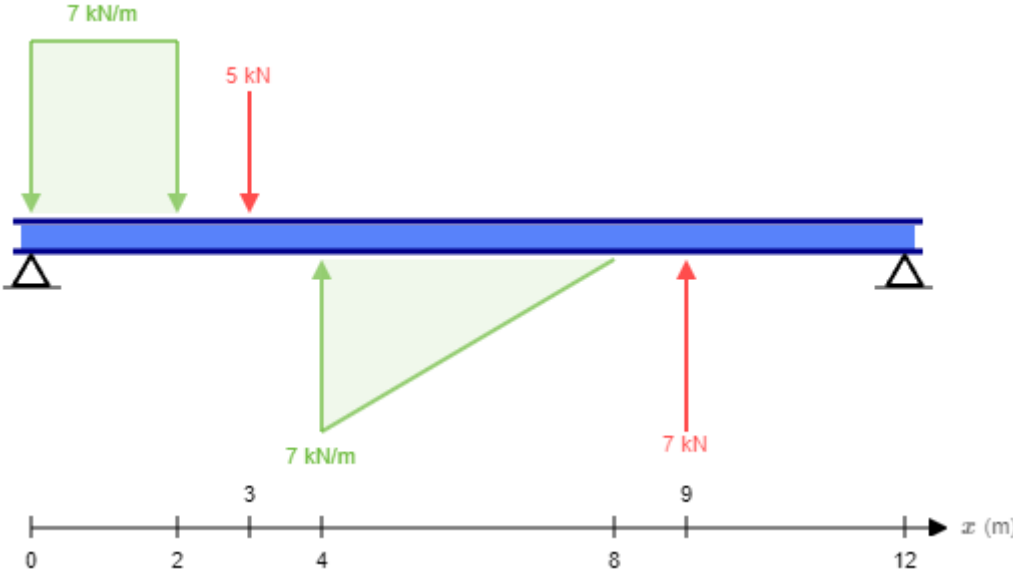
4) Draw the FBD for when you cut at 4m and 8m, with the corresponding distributed force after the cut and the resultant force of it.



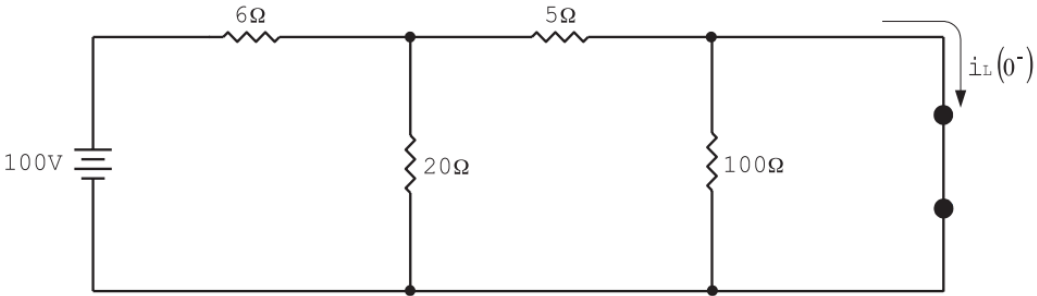
5) Find out the reaction force of the roller support



6) Calculate the internal forces if you cut in 9m and you keep the left side.

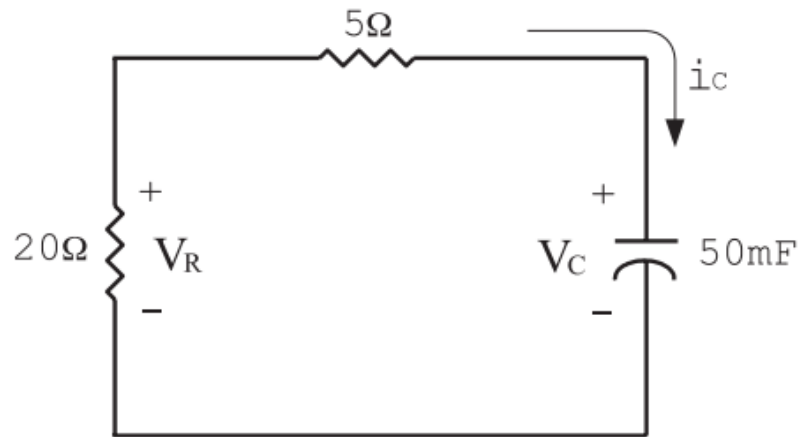


7) Calculate the voltage in each resistor, and the inductance if a resistor of 50 ohms is connected in the given points



8) Calculate the discharge voltage and the voltage uses in VR if a fully charged capacitor is connected with a

$$V_C = 12V$$



9) Calculate V_x and I in this circuit.

