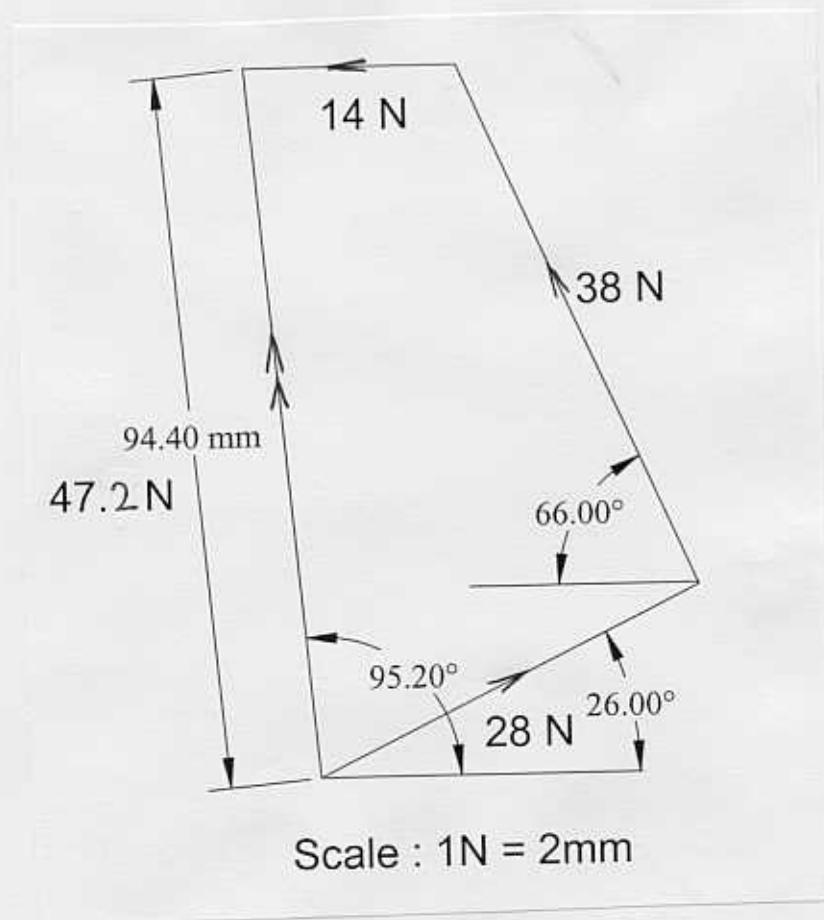


Qu. 11

The resultant force on A can be found by drawing a vector diagram or resolving forces.

The vector diagram is given:



This results in a force on A of 47.2 N at 95.2° .
If a force exactly equal and opposite is applied at B there will be no resultant force on A.

The moment (torque) transmitted will be equal to the moment of the couple

$$= \text{Force} \times \text{distance between their lines of action}$$

can be found graphically = 51.00 mm

$$\therefore \text{Torque} = 47.2 \times 51 \times 10^{-3} = \underline{2.41 \text{ Nm}}$$