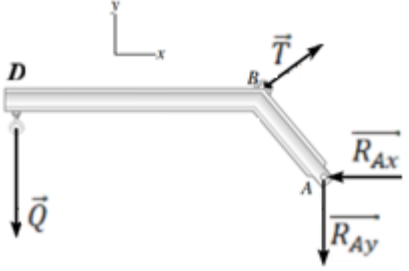


CC Correction – MR1

	0,25 x 4
$\begin{cases} \sum \vec{F} = \vec{0} \\ \sum \vec{M}_A(\vec{F}) = \vec{0} \end{cases}$	0,25 0,25
$\begin{cases} \vec{Q} + \vec{T} + \vec{R}_A = \vec{0} \\ \vec{M}_A(\vec{Q}) + \vec{M}_A(\vec{T}) + \vec{M}_A(\vec{R}_A) = \vec{0} \end{cases}$	0,5 0,5
$\vec{M}_A(\vec{R}_A) = \vec{0}$	0,5
$\vec{M}_A(\vec{Q}) = \overrightarrow{AD} \times \vec{Q} = \begin{pmatrix} -260 \\ 91 \\ 0 \end{pmatrix} \times \begin{pmatrix} 0 \\ -Q \\ 0 \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ 260Q \end{pmatrix}$	01
$\vec{M}_A(\vec{T}) = \overrightarrow{AB} \times \vec{T} = \begin{pmatrix} -60 \\ 91 \\ 0 \end{pmatrix} \times \begin{pmatrix} T \cos 37^\circ \\ T \sin 37^\circ \\ 0 \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \\ -60T \sin 37^\circ - 91T \cos 37^\circ \end{pmatrix}$	01
$\begin{cases} T \cos 37^\circ - R_{Ax} = 0 \\ T \sin 37^\circ - R_{Ay} - Q = 0 \\ -T(60 \sin 37^\circ + 91 \cos 37^\circ) + 260Q = 0 \end{cases}$	0,5 x 3
$\begin{aligned} R_{Ax} &= 1297,9N \\ R_{Ay} &= 298,1N \\ T &= 1625,2N \end{aligned}$	0,5 x 3
$\begin{aligned} R_A &= \sqrt{R_{Ax}^2 + R_{Ay}^2} \\ R_A &= 1330,8N \end{aligned}$	0,5 x 2
$\theta = \tan^{-1} \left(\frac{298,1}{1297,9} \right) = 12,9^\circ$ <p>counterclockwise from the negative x-axis</p>	0,5 x 2