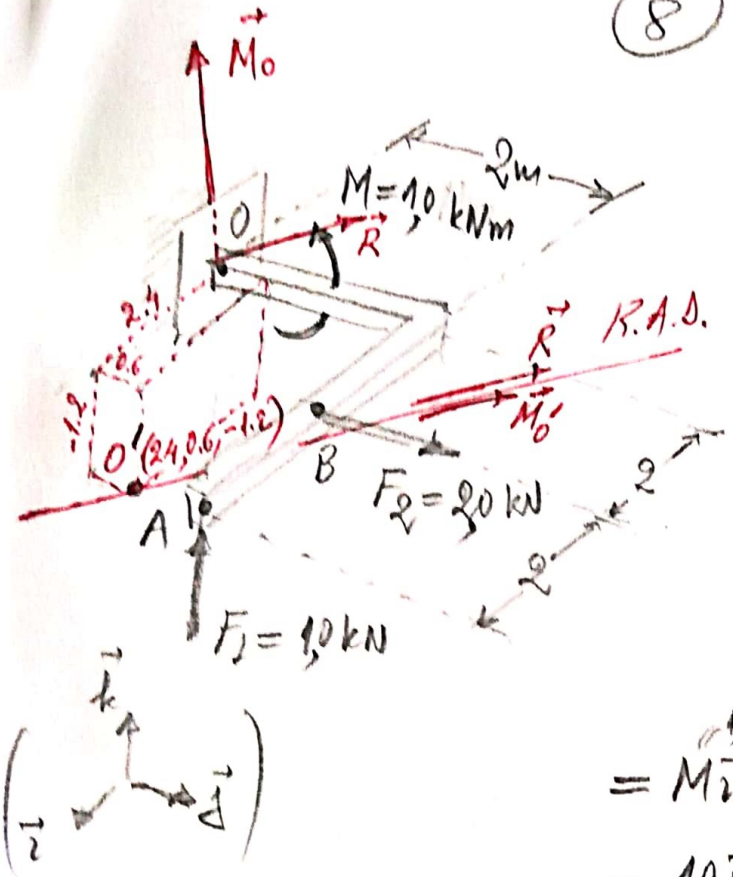


(8)

No prvi avazaji 670 antiparalelno
Drugo vektora paralelno



$$S_1 = \{(\vec{F}_1, A), (\vec{F}_2, B), \vec{M}\}$$

1^o Avazaji 670 0

$$\vec{R} = \vec{F}_1 + \vec{F}_2 = \underline{1\vec{i} + 2\vec{j}} \text{ kN}$$

$$\begin{aligned} \vec{M}_O &= \vec{M} + \vec{OB} \times \vec{F}_2 + \vec{OA} \times \vec{F}_1 = \\ &= 10\vec{i} + (2\vec{i} + 2\vec{j}) \times 20\vec{j} + (4\vec{i} + 2\vec{j}) \times 10\vec{k} = \\ &= 10\vec{i} + 40\vec{k} - 40\vec{j} + 20\vec{i} = \\ &= \underline{3\vec{i} - 4\vec{j} + 4\vec{k}} \text{ kNm} / S_2 = \{(\vec{R}, O), \vec{M}_O\} \end{aligned}$$

Udaljenost uadriziranja \vec{R}, \vec{M}_O . Ar uadrna $\vec{R} \cdot \vec{M}_O = 0$, ka i to vektora su antiparalelna ili paralelna

$$\vec{R} \cdot \vec{M}_O = (2\vec{j} + 1\vec{k}) \cdot (3\vec{i} - 4\vec{j} + 4\vec{k}) = -8 + 4 = -4 \neq 0, \text{ dpa}$$

stavu $(\vec{R}, \vec{M}_O) \neq \frac{\pi}{2}$, odore u 2^o

antiparalelna avazaji stavu 670 vektora KAD: $\vec{M}_O \parallel \vec{R}$

$$S_3 = \{(\vec{R}, O'), \vec{M}_O \parallel \vec{R}\}$$

Ardi drupia stavu:

$$(2.1.4) \quad \vec{OO'} = \frac{\vec{R} \times \vec{M}_O}{R^2}$$

$$\begin{aligned} \vec{R} \times \vec{M}_O &= (2\vec{j} + 1\vec{k}) \times (3\vec{i} - 4\vec{j} + 4\vec{k}) = -6\vec{k} + 8\vec{i} + 3\vec{j} + 4\vec{i} = \\ &= 12\vec{i} + 3\vec{j} - 6\vec{k} \end{aligned}$$

$$R^2 = |\vec{R}|^2 = \sqrt{1^2 + 2^2}^2 = 5$$

$$\vec{OO'} = \frac{12\vec{i} + 3\vec{j} - 6\vec{k}}{5} = \underline{2.4\vec{i} + 0.6\vec{j} - 1.2\vec{k}}$$

Priznanje KAD: $\left\| \frac{\vec{R} + \vec{M}_O}{R^2} + \lambda \cdot \frac{\vec{R}}{|\vec{R}|} \right\|$