Vraag 1

2. $(11.2 - 0.43x) \times 10^4$ N
3. 8.2×10^4 N
4. $(G_L x - 21.1) \times 10^4$ N m

Vraag 2

1. $\omega = 0.25 \sin^2 \theta$ Hz
2. 0.188 Hz
4. $\alpha = 0.125 \sin^3 \theta \cos \theta$
5. $\vec{v}_B = -1.25 \sin^3 \theta \text{m/s} \vec{e}_x + 1.25 \sin^2 \theta \cos \theta \text{m/s} \vec{e}_y$
   $a_{Bt} = 0.625 \sin^3 \theta \cos \theta \text{m/s}^2$
   $a_{Bn} = 0.3125 \sin^4 \theta \text{m/s}^2$

Vraag 3

1. Situatie 1:$\vec{R}_1 = 6857\text{N} \vec{e}_{y'}$ $\vec{R}_2 = 5142\text{N} \vec{e}_{y'}$
2. Situatie 2:$\vec{R}_1 = 6857\text{N} \vec{e}_{y'}$ $\vec{R}_2 = 2400\text{N} \vec{e}_{x'} + 5142\text{N} \vec{e}_{y'}$
3. Situatie 3:$\vec{R}_1 = -2080\text{N} \vec{e}_{x'} + 6336\text{N} \vec{e}_{y'}$ $\vec{R}_2 = 5481\text{N} \vec{e}_{y'}$
4. Situatie 4:$\vec{R}_1 = 6857\text{N} \vec{e}_{y'} + 770\text{N} \vec{e}_{z'}$ $\vec{R}_2 = 5142\text{N} \vec{e}_{y'} + 580\text{N} \vec{e}_{z'}$

Vraag 4

3. $\frac{3}{\cos(\pi/4 - \theta/2)} \times 10^4\text{N}$
4. $\frac{3 \cos \theta + 3.8 \sin \theta}{\cos(\pi/4 - \theta/2)} \times 10^4\text{N}$