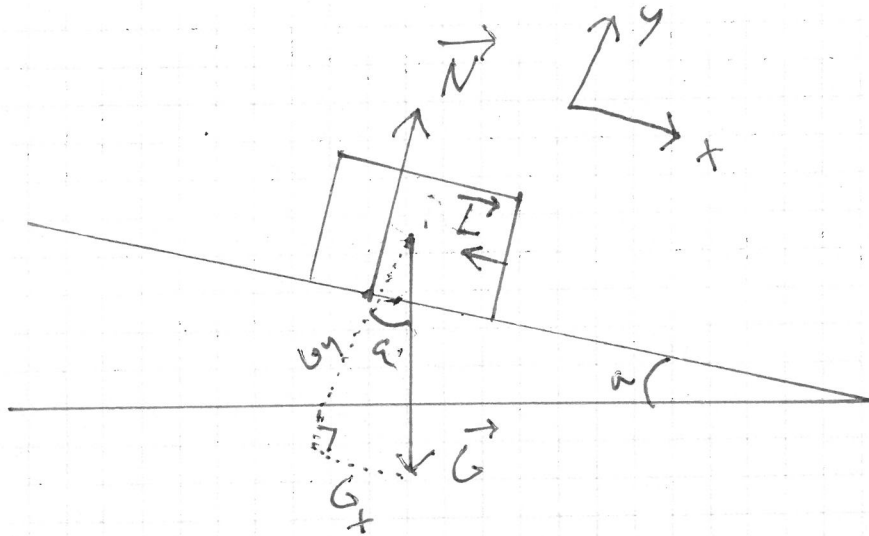


Ark nr / total	Dato	Kandidatgruppe	Kandidatnummer
1/4	23.5.24	REA3039-1	292L00-V
Del			
2			

Oppg. 4  
a)



N.1 for  $\sum F_x = 0$

$$G_x = G \cdot \sin \alpha \quad L = k v^2$$

$$\sum F_x = G \cdot \sin \alpha - k v^2$$

$$0 = G \sin \alpha - k v^2 \quad | + k v^2$$

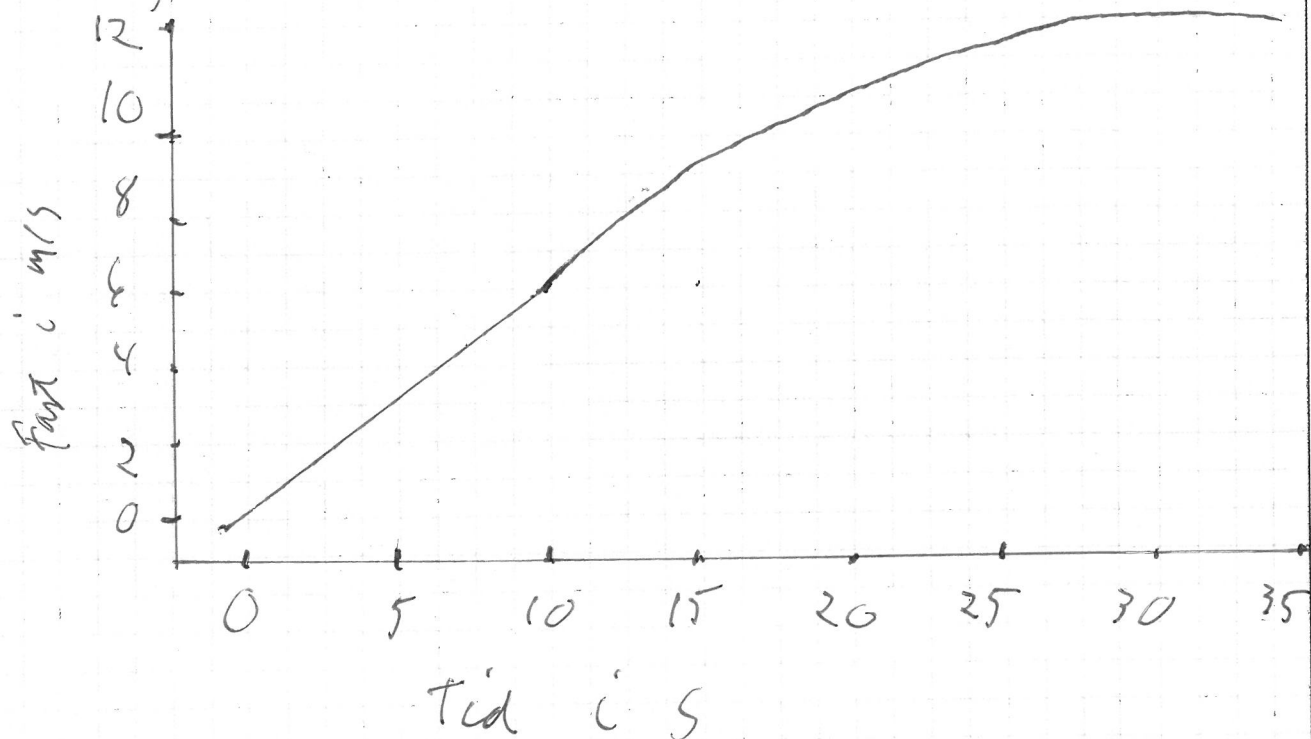
$$k v^2 = m g \sin \alpha \quad | : v^2$$

$$k = \frac{m g \sin \alpha}{v^2}$$

Ark nr / total	Dato	Kandidatgruppe	Kandidatnummer
2 / 4	23.5.24	REA3039-1	292600-V
Del			
2			

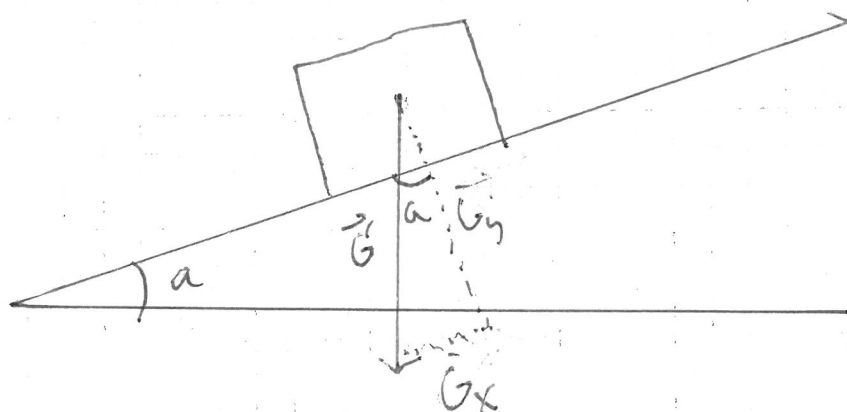
Oppg. 4

d) Forklaring digitalt



Oppg. 5

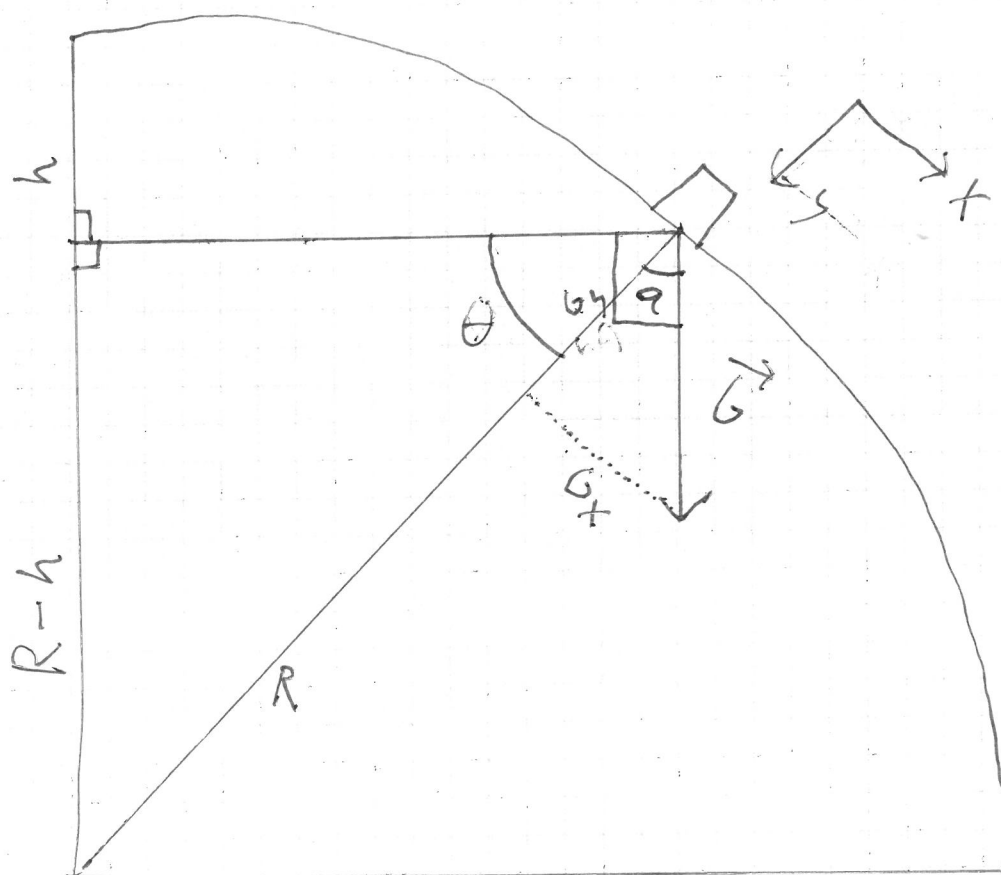
b) Utregning digitalt



Ark nr / total	Dato	Kandidatgruppe	Kandidatnummer
3/4	23.5.24	REA3031-1	292L00-V
Del			
2			

oppg. 5

a)



$$\sin \theta = \frac{R-h}{R} \quad \theta + \alpha = 90^\circ \quad \alpha = 90^\circ - \theta$$

$$\alpha = 90^\circ - \sin^{-1}\left(\frac{R-h}{R}\right) \quad \cos(90^\circ - \theta) = \sin \theta$$

$$G_y = \cos \alpha \cdot G$$

$$G_y = G \cdot \cos\left(90^\circ - \sin^{-1}\left(\frac{R-h}{R}\right)\right)$$

$$G_y = G \cdot \sin\left(\sin^{-1}\left(\frac{R-h}{R}\right)\right)$$

$$G_y = G \cdot \frac{R-h}{R}$$

Resten er direkte

Ark nr / total	Dato	Kandidatgruppe	Kandidatnummer
4/4	23.5.24	REA3039 - 1	292L00-V
Del			
2			

