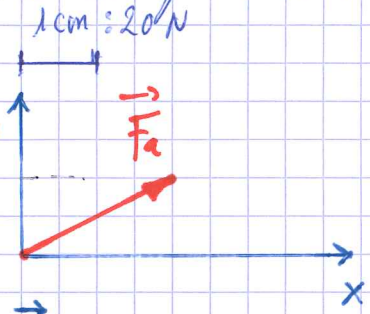
Décomposer les forces suivantes selon les directions des axes proposées.

Sachant que l'échelle utilisée est de 1 cm : 20 N donner l'intensité de la force originale ainsi que des intensités des composantes

a)



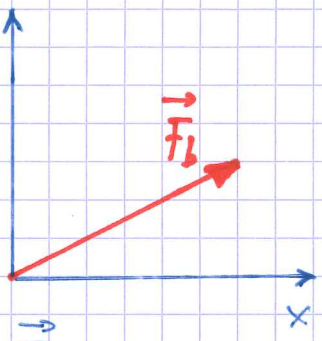
$\vec{F}_a =$

$F_{ax} =$

$F_{ay} =$

$F_a =$

b)



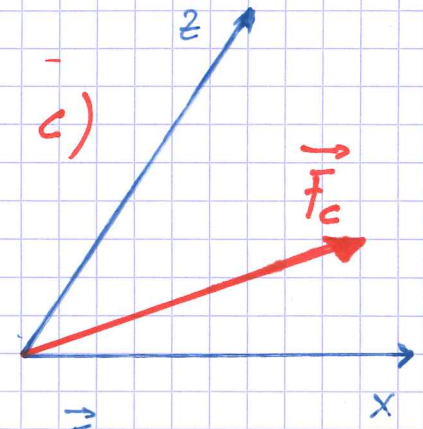
$\vec{F}_b =$

$F_{bx} =$

$F_{by} =$

$F_b =$

c)



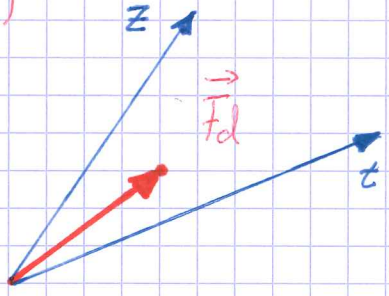
$\vec{F}_c =$

$F_{cx} =$

$F_{cz} =$

$F_c =$

d)



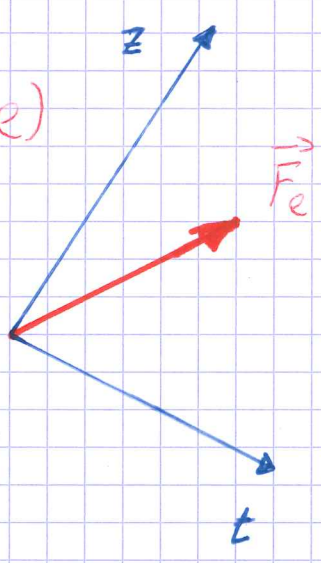
$\vec{F}_d =$

$F_{dt} =$

$F_{dz} =$

$F_d =$

e)



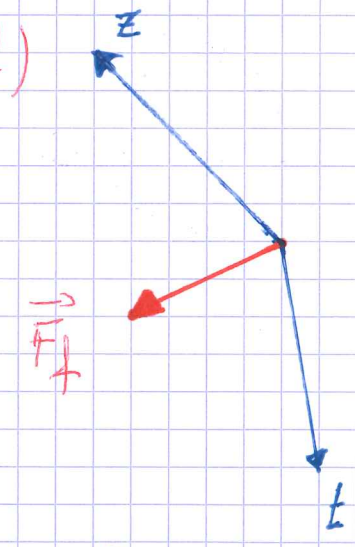
$\vec{F}_e =$

$F_{et} =$

$F_{ez} =$

$F_e =$

f)



$\vec{F}_f =$

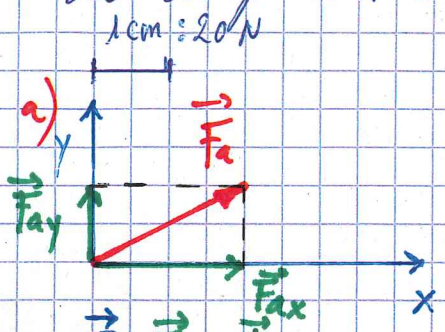
$F_{ft} =$

$F_{fz} =$

$F_f =$

Décomposer les forces suivantes selon les directions des axes proposées.

Sachant que l'échelle utilisée est de 1 cm : 20 N donner l'intensité de la force originale ainsi que des intensités des composantes



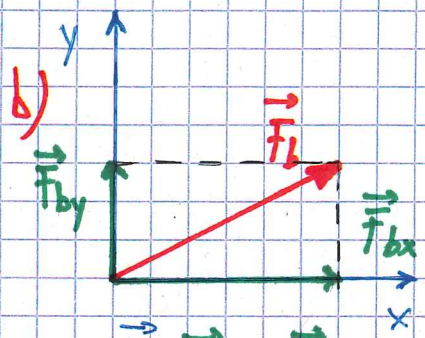
$\vec{F}_a = \vec{F}_{ax} + \vec{F}_{ay}$

$F_{ax} = 40\,N$

$F_{ay} = 20\,N$

$F_a = 44\,N$

1 cm : 20 N
2,2 cm : 44 N

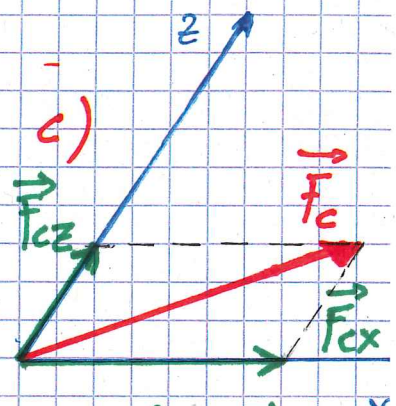


$\vec{F}_b = \vec{F}_{bx} + \vec{F}_{by}$

$F_{bx} = 60\,N$

$F_{by} = 30\,N$

$F_b = 68\,N$

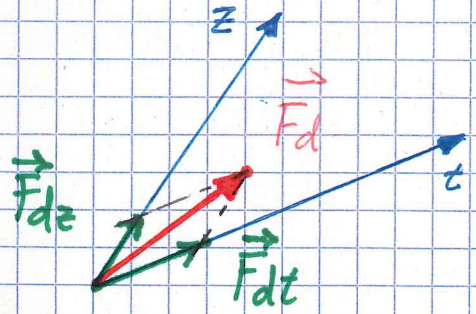


$\vec{F}_c = \vec{F}_{cz} + \vec{F}_{cx}$

$F_{cx} = 70\,N$

$F_{cz} = 36\,N$

$F_c = 94\,N$



$\vec{F}_d = \vec{F}_{dt} + \vec{F}_{dz}$

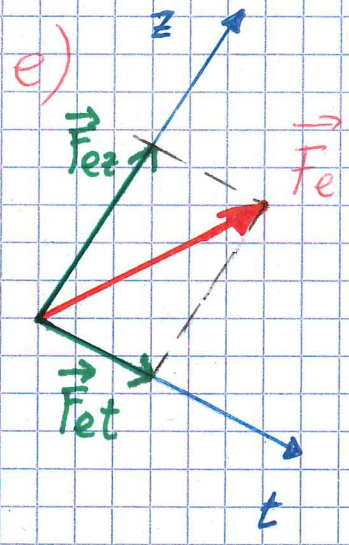
$F_{dt} = 30\,N$

$F_{dz} = 22\,N$

$F_d = 50\,N$

1 cm : 20 N
1,1 cm : 22 N

1 cm : 20 N
1,5 cm : 30 N



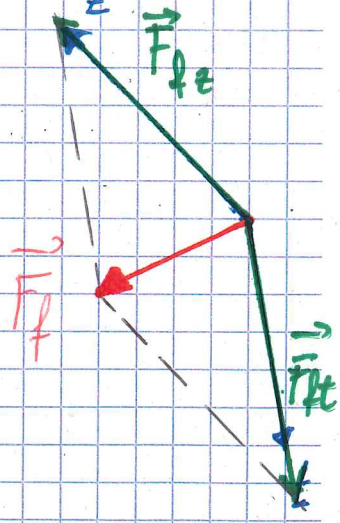
$\vec{F}_e = \vec{F}_{et} + \vec{F}_{ez}$

$F_{et} = 34\,N$

$F_{ez} = 56\,N$

$F_e = 66\,N$

1 cm : 20 N
1,7 cm : 34 N
2,8 cm : 56 N



$\vec{F}_f = \vec{F}_{ft} + \vec{F}_{fz}$

$F_{ft} = 76\,N$

$F_{fz} = 74\,N$

$F_f = 44\,N$

1 cm : 20 N
3,7 cm : 74 N
3,8 cm : 76 N