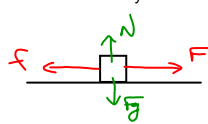


Net Force - Forces at angles Page 168

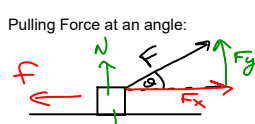
So far we have been working with forces using free body diagrams, but with all forces directly in the x or y direction:



$F_x = F - F$ (x DIR)
 $F_x = 0$ (com. SP)
 $F_x = F$

$N = F_g$ (y DIR)

Pulling Force at an angle:

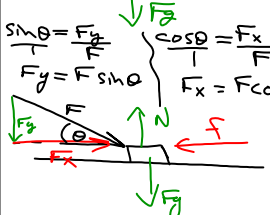


$F_x = F - F$ (x DIR)
 $F_x = F$ (com. SP)

$N + F_y = F_g$ (y DIR)
 $N = F_g - F_y$

$\sin \theta = \frac{F_y}{F}$
 $F_y = F \sin \theta$

$\cos \theta = \frac{F_x}{F}$
 $F_x = F \cos \theta$



$F_x = F_x - F$ (x DIR)
 $N = F_g + F_y$ (y DIR)

Oct 25-8:37 AM