Good Morning!!!

Please take a worksheet from the front desk.

Take the first half hour of class and work on it.
You may work with another student.

I will go over the problems that you request
from either the worksheet or the homework.

Most Requested

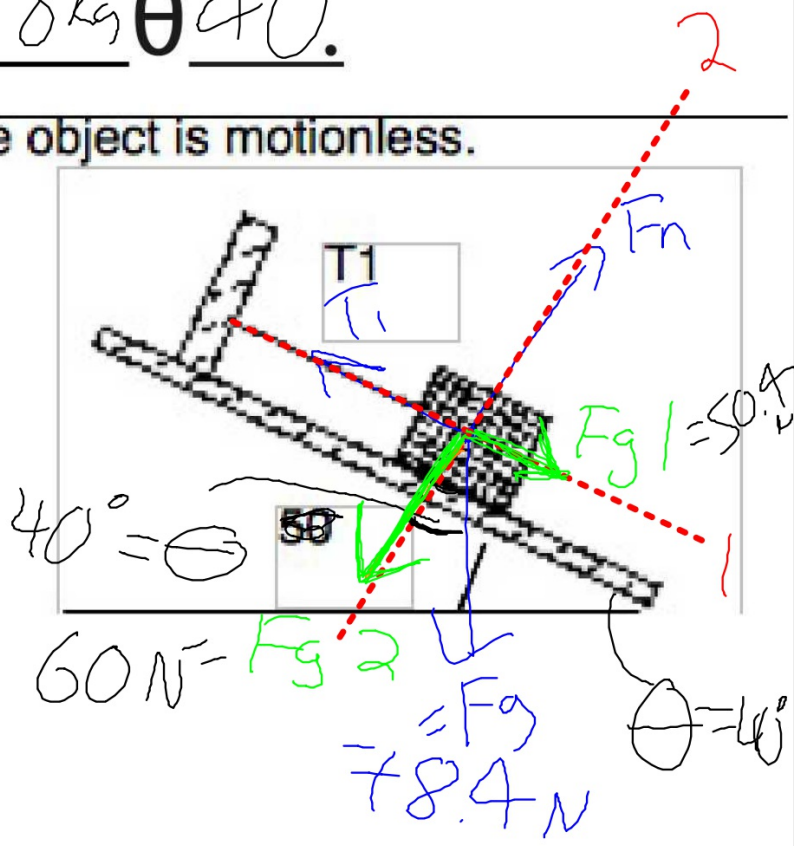
3, 5, 6, 7, 8, 14

7

M= 8kg θ 40°

T1 = 50.4 N

The object is motionless.



3 Physics Experiments that Changed the World

8

M= 17kg

T = Fg

load

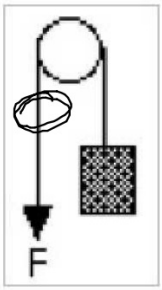
Fpull = Fg

166.6 N

The object is pulled upward at constant speed.

T = Fg

Box 17kg



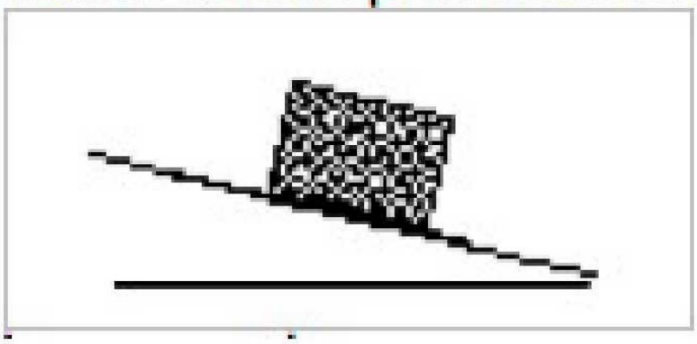
Fg = 9.8 m/s² 17 kg =

3

$M = \_\_\theta\_\_.$

Same as #7

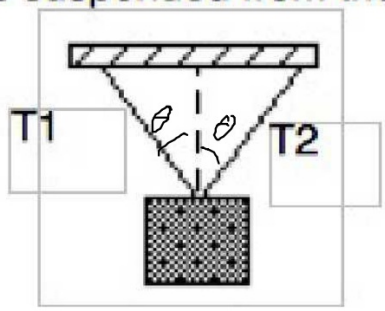
Static friction prevents sliding.



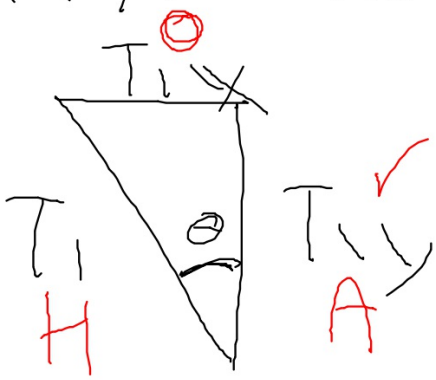
S

M= 10kg θ 20°.

An object is suspended from the ceiling.



$T_{1y} = 49\,N$



T_{1y} ✓

$H\cos\theta = \frac{A}{H} H$

$\Rightarrow \frac{H\cos\theta}{\cos\theta} = \frac{A}{\cos\theta}$ $\approx 56\,N$

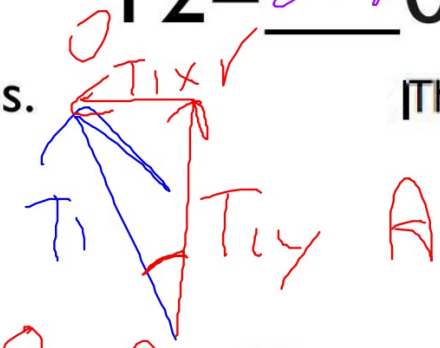
6

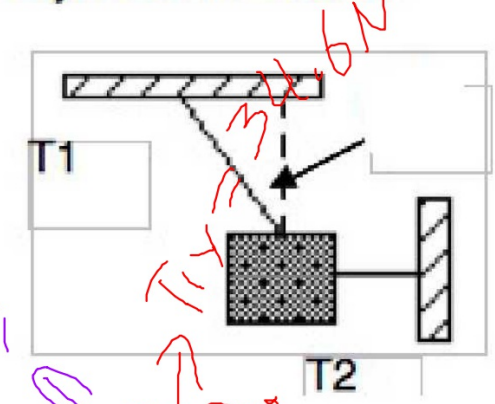
T2= 20N θ 30°.

Solve for mass.

The object is motionless.

m = 3.5kg





$\frac{A \tan\theta}{\tan\theta} = \frac{O}{A}$ $A = \tan\theta$

$\Rightarrow A = \frac{O}{\tan\theta}$

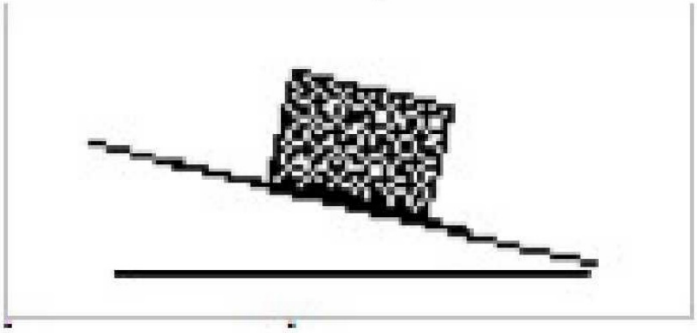
$A = 34.6N$

$20N = T_{1x}$ $T_2 = 20N$ $\theta = 30°$

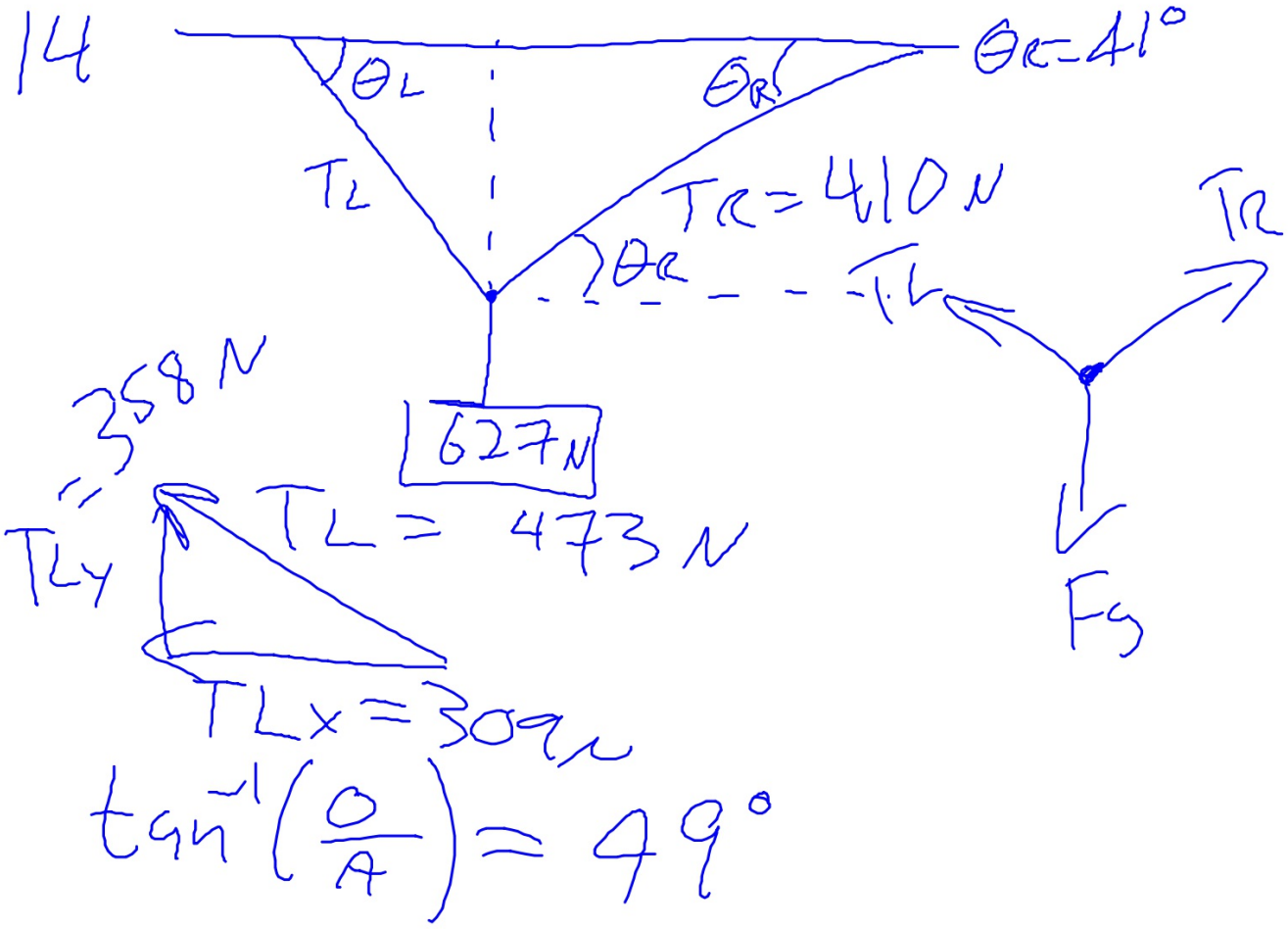
$F_g = 34.6N$

M=___θ___.

An object slides at a constant velocity. Find Ff.



14



$$\tan^{-1}\left(\frac{O}{A}\right) = 49^\circ$$