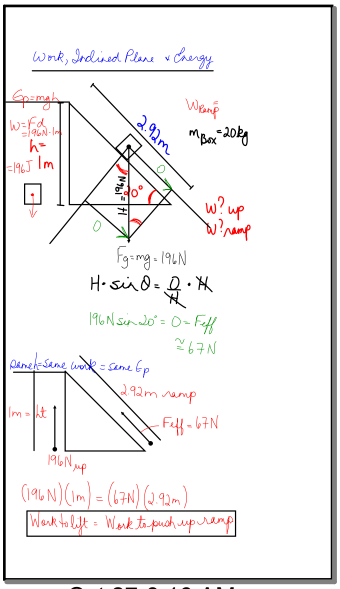
Work, Inclined Plane & Energy
Ep=mgh
W=Fd
=196N·1m
h=
=196J
1m
2.92m
W_ramp=
m_Box=20kg
H=196N
20°
O
W? up
W? ramp
Fg=mg=196N
H·sinθ = O/H · H
196N sin 20° = O = Feff
≃ 67N
Same h = same work = same Ep
2.92m ramp
1m = ht
Feff = 67N
196N up
(196N)(1m) = (67N)(2.92m)
Work to lift = Work to push up ramp

Oct 27-8:16 AM