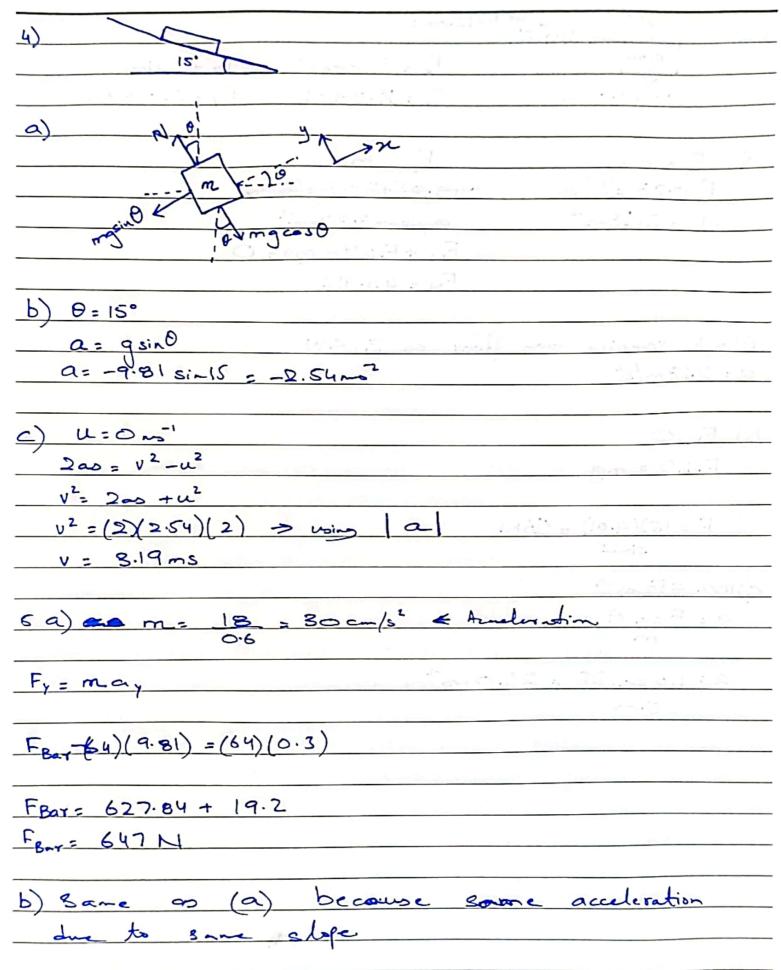
	Date 15th OEC 2025
NS100	Ol Applied Physics
	SIGNMENT #3
1(a) ==== F = ma	and the state of the state of
$m = \frac{2.21}{9.81} = 0$	.225kg
9.81	
DS = 1 (DV) Dt	
2	I to particular
AS = 1 (+18) (0.17) = +1.53	n
	100g(0)(pg)
(b) a = AV = 18 = 106, At 017	10 - 11 mar 21 . 1
Δt 017	
Fi: Force of pitcher on	ball E Weight
	pari
\$ F1 + F2= 10 mg	of Forces Humal free of rushing or
	Fiy+Fzy= may
Fix = max	
	S. Fig. 1-221 to and Hind in a
·	Coulin Arraida force of Proch on
$F_1 = \sqrt{23.9^2 + 2.21^2}$	hower to end lemel with
	But the Form of walted and
0 = tan (2.21) = 5.29°	
	Ever Grading Force of Booth .
	of 24.0N forward at 5.29
anticlochaise from the	positive x-avis
and the course of the course o	

Date	
2(2)	
<del></del>	
(a) Brick free-body diagram 1	
R=-Mg N	
	1 2 3
W=Mg N	
Ь)	1,1 = 10
R=-mg-FBrich	10.5.
Forick	
mg	5 - 1 d - 1 - 4
(c) Force: Normal force of custion on brick	1 7 7
Reaction: Force of brick on cushion	4
Force: Gravity force of Earth on Brich	
Reaching Gravity force of Brich on Earth	
Force: Normal force of ground on cushion.	7
Force: Normal force of ground on austrian. Reaction: Hor Force of austrian on ground	4 - 17
Fore: Cyravity Form of Earth on custion	
Force: Gravity force of Earth on cushion Reaction: Gravity force of cushion on Earth.	
The state of the second section of the second section of the second section of the second sec	
	ixel

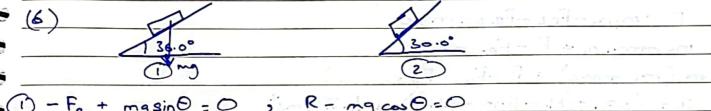
(.X		
Date		

1N 10:35: F	= 12.0N	,
3(4)	Fx = 12 == 25	Fy = 1201-25
W=49.05N	Fx = 10.88 N	Fy = 5.07 N
a) France	Fy = may	1/2
F10.88 = (5) ax	-47.02+20.PH	
ax= 2.18m-2	ay = -8.80 -2	
	FN + Fsin0 - mg=	
	FN = 43.9N	
Black remains on fl	bor as FNKW	-(a, p)(1)
a= 2.18m/s2	Man de la la	- 11-10/50 as
b) FN=0		Friend by it
FsinD = mg		20- 1 m 202
7		This year C 2 4
F = (5)(9.81) = 116N	1.01 .1.0	VE 1(22/2-20)(2)
sin25		San Marie e to
c)ma = Feas O		
•	A 34 . • 1 . • 10	
a = Fcos D	and the same of th	3.0
	-2	
a= 116 cos 25 = 21.0	~>	
6.00		
and the state of t	- 1 con a col (5.0)	Othe Craffing 3
		M + H .TCA m al
		11542 2 3
with a dealer and	in the man of	1201 - 2001 1
The last of the la		
	- 27) - 1 - (-)	
		er.
Par Control of the Co		ixel



Date		

20	<i></i>
c) ay= 0 mo-2 at d- 1.1.	
Fy = may	7
FBAY - (64)(9.81) =0	1 - 4 /
For = 627 N upwards.	Te de production de la constantion de la constan
Principal Marian	g water to the contract of the
d) ay = 0-24 = -60	
d) ay = 0-24 = -60	C
Fy = may and good and	1 2
FB-7 - (64)(9.81) = (64.0)(-0.6)	
FOCT = 589 NL Up.	die men To
(6)	The sale of the sale of



b) Not banked so 0=0°

V= Rg Ms

 $\mu_s = (17^2) = 0.196$ (150)(9.81)

G:00m 10.0kg → F=45.0N

T < 5kg > FR1

V49 N

R2

FR1

FR1

90N

b)  $F_{1}$ :  $R_{1}$ =  $m_{1}g$   $F_{2}$ :  $F_{2}$ = T  $R_{1}$ = (5)(9.8)  $F_{2}$ :  $\mu R_{1}$ = T  $R_{1}$ = (49.0N) T= (0.20)(49) T= (0.20)(49)

P

3

 $F_{x}: R_{z}-R_{1}-98=0$   $F_{x}: 45-F_{R_{1}}-F_{R_{2}}=10a$   $F_{R_{2}}=\mu R_{2}:\mu (n_{1}+98)$ 

F<sub>R2</sub>=(0.20)(49 + 98)=29.4 45 - 9.8 -29.4 = 10a

a = 0.58 mo2

. X	
Date	
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10 Mr.= 0.3	
10 u= ons-1  u= ons-1  y= 1.00m = t= 0.483	
160° g=1.00m st=0.483 -x	
8= ut + Lat'	
1=(1)(2)(0.403)2	
(3)(3)	
a= 8.57mo2	
[40.0pg 4 4-4 sales ] }	
EFy=may EFx=max	
R-mgcas0=0 mgsin0-Fe=10ma	
$R = mg \cos \theta$	1377
a=(981)(sin60-0.3cos60)	
$a = 7.02 \text{ m}^{-2}$	174
Situation is impossible because these forces cannot	L
produce this acceleration.	<u> </u>
product has acceleratione	1
720 \ 1	
d.tin-Cathian Marint 2	
	AI
No.	lixel