



=) Assignment #3 (Applied-physics) Name: Yash-Raj Roll-numbu: 24k-0737 Eis 3nc at Xisdem. 22 5 - 7nc at X25 4cm. 93 : Snc is at Origin Manifucle of chart resultant-force on 23:?

Odirection of resultant force: forces on 23 du to 21 and 22: 5 (9x109) (3x109) (5x109) F13 = 3.375 × 10-13N)





Name: Yash-Raj Roll-no: 24k-0737 Date

53 · <u>Klili</u>

, (9x/01)(7x/0<sup>-9</sup>)(5x/0<sup>-9</sup>)
(0.04)<sup>2</sup>

[F13 = 1.968 × 10-13N]

frut , f23 · f13

(1.968 ×10<sup>-13</sup>) - (3.375 ×10<sup>-13</sup>)

[fret: -1.40625 X/6-13N]

1 Freel - 140625 X10 3N

Direction: Nyative n-anis (toward Er)

**CS** CamScanner





Name York-Ray Rolling : 04k 073-7

Liven-Data:
21 = Duc 4 :0:3m

22 = Duc at x = 6.

Aquinol:

magnifucle of resultant force on Ez :
Direction of this force:

803,.

F. K 1.82

7/3 5 /x2+42

= \( \left( 6.4 \right)^2 + \left( 6.3 \right)^2

5 JOH +0.9

Frs. (9x10) (0x10-1) (4x10-1)

[FB. 2.88x 16"N]



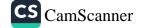


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Name Yash-Raj	Roll-no: \$104K-0737 Date	and the same of th
		•
A : A	an'(4.)	
	( X	1
tan	$\left(\frac{6\cdot3}{0\cdot4}\right)$	•
O.A.L.	(0.4)	9
Egn'	(6.75)	•
[O:	(6.75) 36.87 <sup>-</sup> 1	9
	Angere America	6
	Y23 5 6.4m	
	1. 1	
23 5	(9×101)(2×10-6)(4×10-4)	
	(0.92	
17	1015-10 1	8
	13: 4.5X/0-10N	6
		0
Eiz	· f13(010, , f134 · f13 sino.	0
/13%	7/3(0.0)	<b>.</b>
,		0.
f13 x =	(2.8 × 10-10)(01(36.87) . 2.304 × 10-10 N	•
		<u>_</u>
f13y 5	(2.8 × 10-10) sin (36-87) = 1.728 × 10-10 N	<b>Q</b>
. 0		•
		•
Fx	(5 f13x-f23	
17	(3.304 ×16-10) - (4.5 ×16-10) = -2.186×16-10N)	
( <del>/</del> x	3 N./16 X/0 N)	
		<u>e</u>





Name Yash-Raj Roll-no: - 04k-073-7 fy - Fizy . -1728 X10-10N fret · NFx2+fy2 frut. [(-2.196×10-10)2+(1.728×10-10)2 (Int: -2.79×1510N) O · lan' (fy) 6 , Ean' (1.728 ×10-10. 0 . lan'(-0.787) 6. 180-38:15 A. 141.50







DH3:  Liven-Data:-  [hvu (haye au given:  (i) -2 &   (ii) -0  Required:-  ———————————————————————————————————	D#3.	
/hvu (hayu au givin?  (ii) + Q  (iii) - Q  Ryuined:-  ———————————————————————————————————	Live Data	
/hvu (hayu au givin?  (ii) + Q  (iii) - Q  Ryuined:-  ———————————————————————————————————	<u>arvin baa.</u>	Part Mary Mary M.
(ii) + Q  (iii) - Q  Required:  Soly  =) Surface #1:  Only +Q is inside this surface:  Ger = Lenc - +Q  Eo & &o  =) Surface #2:  +Q and -Q are inside the surface:  Lenc + +Q-(+Q)  *O:	They Charry are	Given ?
(ii) + Q  (iii) - Q  Required:  Soly  =) Surface #1:  Only +Q is inside this surface:  Ger = Lenc - +Q  Eo & &o  =) Surface #2:  +Q and -Q are inside the surface:  Lenc + +Q-(+Q)  *O:	(i) -> 60	7
Required:-   Sour   Source   Source		
Required:  Soly  Soly  =) Surface #1:  Only +Q is inside this surface:  Ge: Lene + Q  Eo Eo  =) Surface #2:  +Q and -Q are inside the surface:  Line: +Q-(+Q)  =0:	(::) -0	
=) Surface #1: Only +Q is inside this surface: Get = Eene + +Q : 60 & 60. =) Surface #2: +Q and -Q are inside the surface: Eine: +Q-(+Q) *0.	(111) 4	
=) Surface #1: Only +Q is inside this surface: Get = Eene + +Q : 60 & 60. =) Surface #2: +Q and -Q are inside the surface: Eine: +Q-(+Q) *0.	Remixed:	
=) Surface #1: Only +Q is inside this surface: Get = Eene + +Q : 60 & 60. =) Surface #2: +Q and -Q are inside the surface: Eine: +Q-(+Q) *0.	- des genus	sud
=) Surface #1: Only +Q is inside this surface: Get = Eene + +Q : 60 & 60. =) Surface #2: +Q and -Q are inside the surface: Eine: +Q-(+Q) *0.	60	
=) Surfau #1: Only +Q is inside this surfau: Get = Lene + +Q -E0 E0. =) Surface #2:- +Q and -Q are inside the surface. Line: +Q-(+Q) =0:	Soy	,
Only +9 is inside this surface:  (See to to to to the surface:  19 and -9 are inside the surface:  Line: +9-(+9)  10.	7	VAPER ASSISTANCE AND STREET
Only +9 is inside this surface:  (See to to to to the surface:  19 and -9 are inside the surface:  Line: +9-(+9)  10.	=) Surlay #1:	
=) Surface #2:- +9 and -9 are inside the surface. Eine: +9-(+9) =0.	Only +0 is	inside this surface
=) Surface #2:- +9 and -9 are inside the surface. Eine: +9-(+9) =0.	de = 2	lene + 4Q
19 and -9 au Inside the surface. Line: +9-(+9) -0.	(2 Arrani	E0 E0.
19 and -9 au Inside the surface. Line: +9-(+9) -0.	=) Suesace #2:	
line s +Q-(+Q) •0.	+9 and -9	an inside the surface.
•0.	Eines +6	7-(19)
Bes Lene s 0.		
Oes Lene s O.		
΄ Εο	De: Len	<u>c</u> s 0 ·
	΄ εο	





Name Yash Raj

Roll-no: 24K-07370 atc -

•
Surfau #3:
-29 and +0 are invide this surface.  Lenc: -20+0
So and to all mind the sugar
 Zenc: -29+9
 0
 Øc. 2inc , -Q Eo 60.
E0 60.
Surface 44 -
 Surface #4" All three charges are inside this surface.
//// // // // // // // // // // // // /
 9en = -1016+(-10)
 genc = -20+0+(-0) = -20.
 3 704
18 - Since20
 De : Lenc = -20 to to My.
E0 C0 M-1





Name: Yash-Raj Roll-no: 24K-6737 Date Given-Data. Particle 1 initial accelerations 7m/s²
Particle 2 initial acceleration = 9m/s² r : 3.2 x 10-3 m m, . 63×163 kg ywill " mis? major hick of chayes: (6.3×10-7)(7) frs mag 4.4x16-6 5 miaz m2 = f2 = 4.41x10 , 4.9x10 kg

a2 g

(m2 + 4.9x10 kg)









Name Yash-Raj Rolling : 04k-0737

Striven Data ..

fsklilz

212 5 fr

2,22 · (1)(2)2 5×105

(2,82 = 4.44 ×16-102)

22: (5×10-5)-21

2,2 = - (5x10-5) 2, +4.44x10-10,0.

815 -6+ 162-4ac





Name Yash- Raj Rull-no: 24K-0737 Date

b: - (5x/6-5) C = 4.44 × 10-16.

2, 5 - (-5×10-5) + J(-5×10-5)2-4(1)(4.44×10-10)

11 · 5x10-5 ± \$ 7.24x1616

17.24×16" = 8.51×166.

2, 5 5x/0 + 851x/0"

9, , 2.93×10-5c 21 2.07 X/0-6C.

Smaller chay 18 (2: 2.07×10-5c) An.