

BY: A JAY MITTAL expending = (4-x)(z-x) (0-(z-y)) = -(y-x)(z-x)(z-y) = -(x-y)(y-z)(z-x) AnsMispunt in workshed (-ve bh; ayega) C2-1(2-C) and C3-7(3-C) $\begin{vmatrix} 1 & 0 & 0 \\ a & b-a & c-b \\ \end{vmatrix}$ taking (b-a) and (C-b) Common from G&G = (b-a)((-b) 0 c2+ b2 +bC b2+92+0b 93 (3-1(3-62) - (b-a)(c-b) = (b-a) (c-b) b'+a2+ab (+a)(c-a) + b (c-a) Faking (C-0) Common from R3 =(b-a)(c-b)(c-a) 1 0 a> b'+a'+ab ctatb! expenden; = (b-a) (c-b) (c-a) (1(a+b+c) -0) = (a-b) (b-c)(c-a) (a+b+c) = RMI ANS

(D.4)

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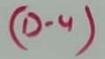
(D-4)



Classmate C

R2 + R2-R1 and R3 + R3-R1 $= \begin{vmatrix} 1 & a^{2} & q^{3} \\ 0 & (b+q)(b-q) & (b-q)(b^{2}+q^{2}+0b) \end{vmatrix}$ 0 (C+a) (C-a) (C2+a2+aC) taky (5-a) & (C-a) Common from R2 & R3 deep az (b-a)(C-0) b-9 b 10 - +ab c' taz tac c-a 0 R3 - R3-R2 93 b2+92+9b a2 b-a (2-b2 +9C-4b C-b = (b-a) (c-a) a2 b2 +a2 +ab b-a c-b (+b)(C-b) +a(C-b) faky (C-b) Common from Rz az = (b-a) (c-a) (c-b) 6-192+9b b-1a C+b +a = (b-a)(c-a)(c-b) ((b+a) (a+b+c) - 1 (b'+a'+ab)) = (b-a)(c-a)(c-b) (ab+by/+bc+qx+ax+ac = (b-a) (c-a) (c-b) (ab+bc+ac) = (a-b) (b-c) (c-a) (ab+bc+ac) = Rry Ams -

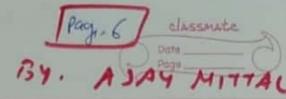
(D-4) pay y durine ULTIMATE MATHEMATICS 1 x3 y3 73 taking x, y, Z Common from C, Co. G sesp. 1 x2 y2 72 (2-1 C3-C1 and (3-) (3-C) = xy2 1 0 X y-X Z-X x= (x+x) (x+x) (x+x) (x-x) - x72 (x-x) (x-x) Y+X Z+X (3-13-62 = (xyz) (x-x) (z-x) expending! = xyz (y-x) (z-x) (z-y) = xyz (x-y) (y-z) (z-x) = RN ANI. ONS 6+ x+4 24 2x 2x x+4 2 X 2x 22 X+4 / C1 -> 9+52+53 2x 2× 15714 x+4 5×+4 X+4) 1 5444 2 %





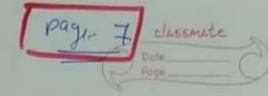
	take (54+4) Common from C1
	= (5x+4) 1 2x 2x 1 x+4 2x
	1 2x x+y
	R2 + R2-R1 and R3 + R3-R1
_	= (5x+4) 1 2x 2x
	0 4-x 0
	0 0 Y-X
	taky (4-x) common from R2 & R3
	= (5x+4) (4-x)2 0 2x 0
	0 0
	expending (1)
	$= (5x+4)(4-x)^{2}(1)$
_	= (5x44) (4-x)= RM ANS
07	+ 1 7 H H H H H H H H H H H H H H H H H H
=	y yth y
	y y y+k
	$C_1 \rightarrow C_1 + C_2 + C_3$
	C1-7 C1+ C2+ C3
	- BYTK) 1 Y Y
	= (34tm) 1 y y
	- BYTK) 1 Y Y
	- (34tk) 1 y y - (34tk) 1 y y 1 y+k y R2+R2-R1 and R3-7 R3-R1
	= (34tk) 1 y y 1 y+k y
	= (34+K) 1
	= (341K) 1 y y y R2 + R2 - R1 ond R3 - 7 R3 - R1 Sytk) 1 y y y Y Y Y Y Y Y Y Y
	= (34+K) 1 y y y 1 y y K 1 y K 1 y y K
	= (34+K) 1

(D.4)



					, ,, ,,	The state of
0~5	8+	1 a-b-c	aa	2a		
_		26	b-c-a	26		
		2 6	20	C-4-	5	
	R,	- RI+R2+	R3			
		a-16+c	a+6+c	а	+5+0 /	
		2 b	b-c-0	a	26	
-		20	20		-a-b	
	= (att	p+c)	1	1	1	1
			ab b)-(-a	26	
			2 C	2 6	C-a-b	
	C2-7	(2-(1 0)	nd (3 -> (3	- C,		
-		-	1 0		0	
-	= (a+	b+()	26 - 6	a+b+ ()	0	
				2	- (a+b+c)
	ex pon					
				1		
	= (a+b+c)	(a+b+1)	2		
	-	(a+b+c)3	- Rhi	ANS		
_		(33.211)	- 129			
ONI	9 >	X+y+2.	z X	7		
=		Z	7+Z+K	2x y		
		1 2	X	7+x-	+24	1-1-1
	C1-10	1+4+13	and the land			
		2(4+512) ~		9	
		2 (xtyte		+2x	7	
		2(2+4+	e) 7	K	Z + x + 2 y	
			III X	X	7	1
-	2((stktx	,	+ y + z	J	
			1	20	X+2y+z	

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R2 + R2 - R1 and R3 - R3 - R1
= 2(x+y+z) x y
expending 0 7tytz 0
= 2(x+y+z) (x+y+z)2-0)
= 2 (x+y+z)3 = RN) AMS
ON 10+ 3a -a+6 -a+6
- b+a 3b -b+c
-C+a -C+b 3C
C1-7 C1+ C2+ C3
= a+b+c -a+b -a+c
9 t h t c
-BTC
= (a+b+c) -a+b -a+c
1 3 5 - 5 + 6
1 -(+b - 3c
R2-1R2-R1 & R3-7 R3-R1
= (a+b+c) -a+b -a+c
0 2b+a -b+a
0 -C+a 2C+a
ex pendy.
= (a+b+c) (2b+q) (2c+q) - (-c+q) (-b+q)]
= (a+b+c) (4bc + 2ab + 2ac + at 1
= (a+b+c) (4bc + 2ab + 2ac + gt - bc + ac + ab -gt) = (a+b+c) (3ab + 3bc + 3ac) = 3(a+b+c) (ab+bc + ac) = Ans
= 3(a+h+c) (ah+hc 10c) = 1.1
(41) (42) (42) - (1N)

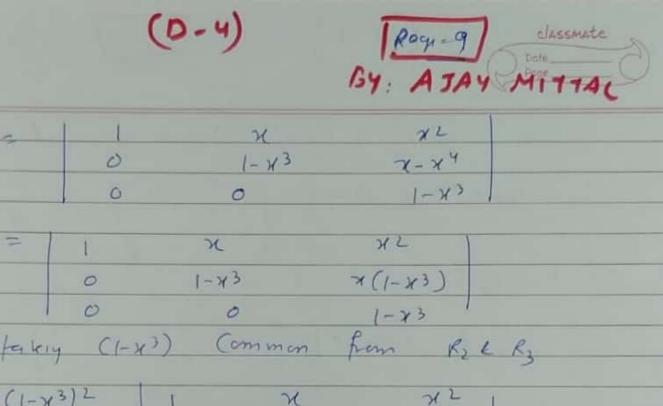
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ONSI	1 a	a+6	a+2b		
	1 9+26	a	a+b		
	a+6	a+26	a		
			'		
9-7	(1+6+13				
=	3 (a+b)	a+b	a+2b1		
	3(9+6)		a+b		
	3(9+6)		a		
= 3 (a.	tb)	a+b	a+2b	1	
)	a	atb 1		
)	atzb	a		
R	P R. OY	nd R3-	R - R		
1527	12	1.3	1.3 (1)	-	
= 3 (0	(+6)	1 9	+ 6	a+2b	
	0		Ь	-b	
	0			- 2 b	
	R3+R2	1			
=	3 (9+6)	1 9+		2+26	
		0 -	40	-b	
		0	0 -3	Ь	
RX	pending				
5	3 (9+5)	$\left(3b^{2}\right)$			
	a tour	12 = 041	And		
	9 (0+6)	p - (m)	J-M		
Ons 12 +	1	>C -	× 2		
	N L	U	X		
	X	y L			

Two Methods Method & (easy)

R2 -7 R2 - 2 R1 and R3 -7 R3 - 2 R1



-(1-x3)2	1	×	X L
	0	1	χ
	0	0	1

 $= (1-x^3)^2 (1)$ = $(1-x^3)^2$ ANS

0

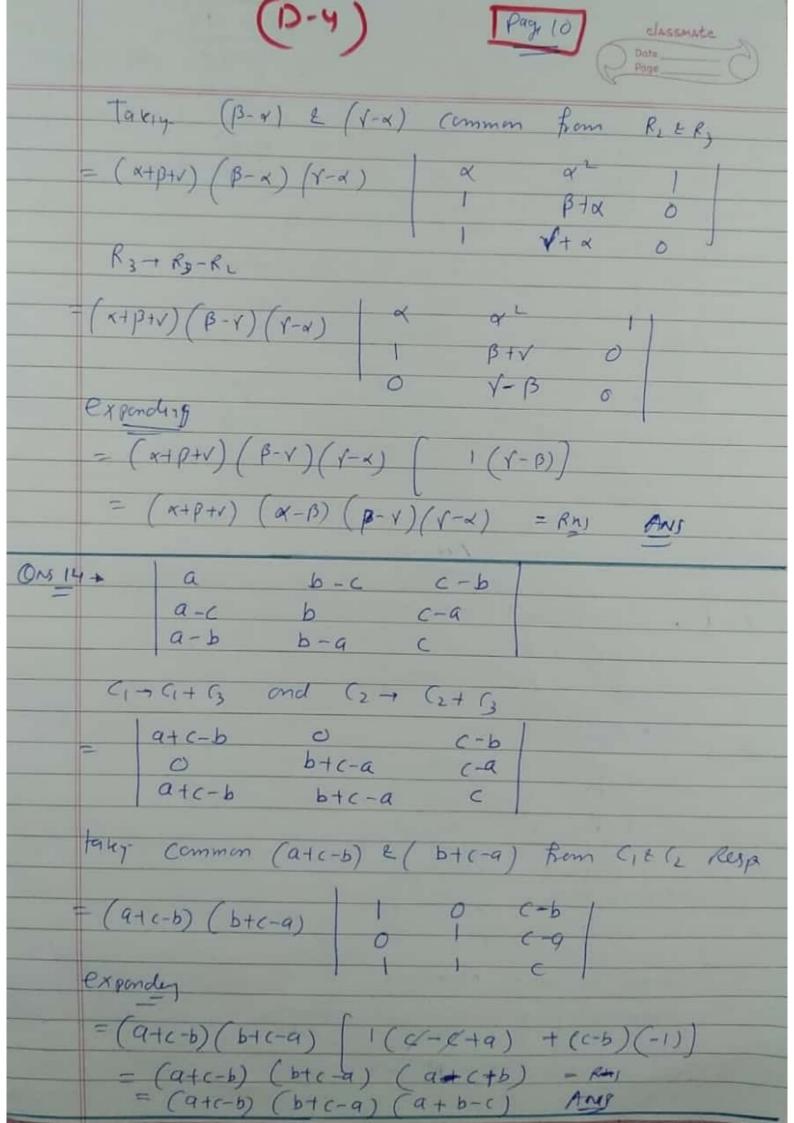
0

OM 13+	14	q2	B+V	
7	B	β²	Y+ ×	
	1	y2	x+B	

C3 - (3+(1 = | of or 2 x+ p+v B2 X+ p+V YL 0 + B+Y

Re+Re-Ry and R3+R3-R1

(x-1 p+v)	1 of	x2)	1
	0-4	B2-~2	0	1
	1 V-X	1 2- ×2	0	1



	11	(0.4)		age y	Classmate Date Page
			157	AJAY	MITTAL
ON 15+	51 cm	1 x + a	×	x	1
		×	xta		=0
		26	26		
Cı-	14 12+13				
=	37+9	χ	χ	1	
		xta	×	=0	
	3x+a	26	2+4		
-1 -	,	1-110			
=)(3x+a	7)	X	X		
		nta	x+a	=0	
	1	×	*1"		- 13 -
R2 + R2	-R, onc	1 R3 ->	R3- R1		
			(X	1
7 (3x+1	9)	0		0	=0
		0 0		a	
expend	leng				
	3x+9) (0	12) =0			
			-	07	
	34+ 9=	0 =	X=	3/4	जा
ON 16 > 91	Cen 2	7-8	3	3	1
= -	-1/.	3	34-8	3	=0
		3	3	32-8	
Cı-	7 (1+ 2+ 3			2 42 4	
			2 1		
)	3×-2	3×-6	3	=0	
	37-2	27 8	37-8	9,	
			- 1		
=> faley	(34-2)	(cmm	on h	am (
			3		
→ (3×	(-2)	3 3×-	8 3		0

3x-8

