

Hasil Tugas Kelompok Matriks Algoritma Lanjut – 2PTI52

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1. Menampilkan Kedua Buah Matriks

```
Matriks P
[ 1 2 3 ]
[ 2 3 1 ]
[ 3 1 2 ]

Matriks Q
[ 4 3 6 ]
[ 5 6 3 ]
[ 6 4 5 ]
```

MATRIKS		
P		
1	2	3
2	3	1
3	1	2
Q		
4	3	6
5	6	3
6	4	5

2. Menampilkan Rumus

```
Matriks R = (3 * Q)^T - ((Q^-1)*(P^-1))^T
```

3. Penyelesaian Rumus 3*Q (Langkah 3)

```
Matriks (3*Q)
[ 12 9 18 ]
[ 15 18 9 ]
[ 18 12 15 ]
```

(3*Q)		
12	9	18
15	18	9
18	12	15

4. Penyelesaian Rumus 3*Q transpose (Langkah 4)

```
Matriks (3*Q)^T
[ 12 15 18 ]
[ 9 18 12 ]
[ 18 9 15 ]
```

(3*Q)^T		
12	15	18
9	18	12
18	9	15

5. Penyelesaian Rumus Q invers (Langkah 5)

Matriks (Q^{-1})

[-0.400	-0.200	0.600]
[0.156	0.356	-0.400]
[0.356	-0.044	-0.200]

Q^{-1}		
-0,400	-0,200	0,600
0,156	0,356	-0,400
0,356	-0,044	-0,200

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6. Penyelesaian Rumus P invers (Langkah 6)

Matriks (P^{-1})

[-0.278	0.056	0.389]
[0.056	0.389	-0.278]
[0.389	-0.278	0.056]

P^{-1}		
-0,278	0,056	0,389
0,056	0,389	-0,278
0,389	-0,278	0,056

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7. Penyelesaian Rumus Q invers * P invers (Langkah 7)

Matriks ($Q^{-1} \cdot P^{-1}$)

[0.333	-0.267	-0.067]
[-0.179	0.258	-0.060]
[-0.179	0.058	0.140]

$(Q^{-1} \cdot P^{-1})$		
0,333	-0,267	-0,067
-0,179	0,258	-0,060
-0,179	0,058	0,140

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8. Penyelesaian Rumus Q invers * P invers transpose (Langkah 8)

Matriks $((Q^{-1} \cdot P^{-1})^T)$

[0.333	-0.179	-0.179]
[-0.267	0.258	0.058]
[-0.067	-0.060	0.140]

$(Q^{-1} \cdot P^{-1})^T$		
0,333	-0,179	-0,179
-0,267	0,258	0,058
-0,067	-0,060	0,140

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9. Hasil Akhir Matriks R (Langkah 9)

Matriks R

[11.667	15.179	18.179]
[9.267	17.742	11.942]
[18.067	9.060	14.860]

HASIL PERHITUNGAN		
$R = (3 \cdot Q)^T - (Q^{-1} \cdot P^{-1})^T$		
11,667	15,179	18,179
9,267	17,742	11,942
18,067	9,060	14,860

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Seluruh Output Program

```
Matriks P
[ 1 2 3 ]
[ 2 3 1 ]
[ 3 1 2 ]

Matriks Q
[ 4 3 6 ]
[ 5 6 3 ]
[ 6 4 5 ]

Matriks R = (3 * Q)^T - ((Q^-1)*(P^-1))^T

Matriks (3*Q)
[ 12 9 18 ]
[ 15 18 9 ]
[ 18 12 15 ]

Matriks (3*Q)^T
[ 12 15 18 ]
[ 9 18 12 ]
[ 18 9 15 ]

Matriks (Q^-1)
[ -0.400 -0.200 0.600 ]
[ 0.156 0.356 -0.400 ]
[ 0.356 -0.044 -0.200 ]

Matriks (P^-1)
[ -0.278 0.056 0.389 ]
[ 0.056 0.389 -0.278 ]
[ 0.389 -0.278 0.056 ]

Matriks (Q^-1)*(P^-1)
[ 0.333 -0.267 -0.067 ]
[ -0.179 0.258 -0.060 ]
[ -0.179 0.058 0.140 ]

Matriks ((Q^-1)*(P^-1))^T
[ 0.333 -0.179 -0.179 ]
[ -0.267 0.258 0.058 ]
[ -0.067 -0.060 0.140 ]

Matriks R
[ 11.667 15.179 18.179 ]
[ 9.267 17.742 11.942 ]
[ 18.067 9.060 14.860 ]
```