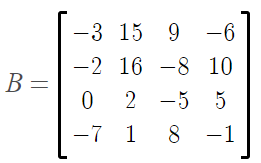
Tugas Aljabar Linear Matrix

1. Yasmin
2. Fikrul
3. Uus
4. Menentukan matrix A dan B

A number and line with numbers

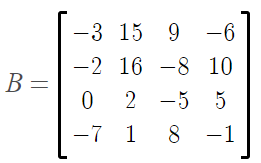
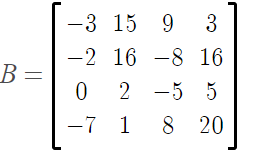
Description automatically generated with medium confidence 

1. Menentukan OKE atau OBE 3 buah

A number and line with numbers

Description automatically generated with medium confidence H13(A)= A number and a line

Description automatically generated with medium confidence

K41(-3)(B) 

A number and line with numbers

Description automatically generated with medium confidenceH2(1)3(2)(A)= A number and line with numbers

Description automatically generated with medium confidence

1. Menentukan equivalen antara matrix A dengan C dan B dengan D

A number and line with numbers

Description automatically generated with medium confidenceA number and line with numbers

Description automatically generated with medium confidence

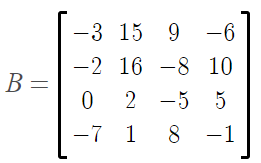
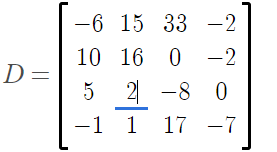
A number and line with numbers

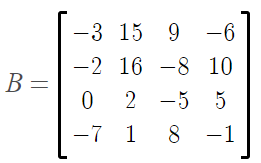
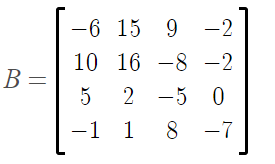
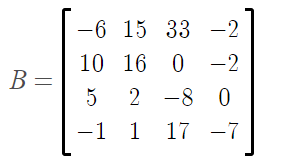
Description automatically generated with medium confidenceH23(A) A number and a line

Description automatically generated with medium confidenceH3(1)1(-1) A number and line with numbers

Description automatically generated with medium confidence

Jadi A~C

K14(B) K3(2)2(1)(B) 

Jadi, B~D

1. Menentukan determinan matriks A menggunakan metode sarrus dan B menggunakan metode kofaktor.



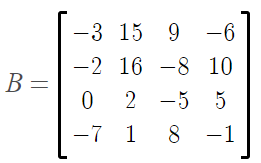
Menentukan determinan matriks A:

Menggunakan metode sarrus



(1x0x4)+(-2x1x2)+(-3x-4x3)-(2x0x(-3))-(3x1x(-1))-(4x(-4)x(-2))=0+4+36-0+3-32=11

Menggunakan metode kofaktor



b11K11+ b12K12+b13K13+ b14K14=

-3 – 15+9- (-6)

=16(-35)-(-8)(-7)+10(21)= -406

= -2(-35)-(-8)(35)+10(-35)=0

= -2(-7)-16(35)+10(14)=-406

= -2(21)-16(-35)+(-8)(14)= 406

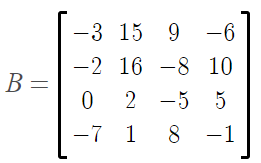
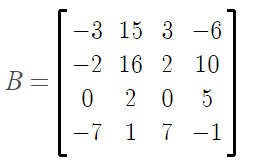
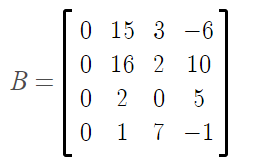
(-3)(-406)-15(0)+9(-406)-6(406)= 406(3-9+6)= 406.0 = 0

Jadi, det(B)=0

1. Menentukan Rank Matriks

A number and line with numbers

Description automatically generated with medium confidence karna tidak bisa dicari lagi, maka Rank (A)= 3

B3(1)4(1) B1(1)3(1) 

Maka, Rank(B)=3