

## Tuntitehtävä 25.10

179.

a)

```
a = [1  1  2  0; ...  
     0  1 -1  1; ...  
     0  1  1  2]
```

```
a = 3x4  
     1     1     2     0  
     0     1    -1     1  
     0     1     1     2
```

rref (a)

```
ans = 3x4   Rows 1:3 | Columns 2:4  
      0      0    -2.5000  
  1.0000      0     1.5000  
      0   1.0000     0.5000
```

b)

```
b = [4  -3  1  2  -3; ...  
     0   0  3 -1  1; ...  
     0   1  2  2  4]
```

```
b = 3x5  
     4    -3     1     2    -3  
     0     0     3    -1     1  
     0     1     2     2     4
```

rref (b)

```
ans = 3x5   Rows 1:3 | Columns 2:5  
      0      0     2.5833     1.6667  
  1.0000      0     2.6667     3.3333  
      0   1.0000    -0.3333     0.3333
```

c)

```
c = [1  4  2  2; ...  
     0  1  5  0; ...  
    -2 -6  2  2]
```

```
c = 3x4  
     1     4     2     2  
     0     1     5     0  
    -2    -6     2     2
```

rref (c)

```
ans = 3x4
    1.0000    0    0 -25.0000
         0    1.0000    0    7.5000
         0    0    1.0000 -1.5000
```

183.

B

184.

```
K = [1 2 3 0;...
     4 5 6 0;...
     3 1 -2 0]
```

```
K = 3x4
     1     2     3     0
     4     5     6     0
     3     1    -2     0
```

rref (K)

```
ans = 3x4
     1     0     0     0
     0     1     0     0
     0     0     1     0
```

x\_1=0

x\_2=0

x\_3=0

x\_1 + 2x\_2 + 3x\_3 = 0

4x\_1 + 5x\_2 + 6x\_3 = 0

3x\_1 + x\_2 + -2x\_3 = 0

=

0+0+0=0

0+0+0=0

0+0+0=0