

Zadanie 2.

Podpunkt 1.

```
(A = Table[i^2 - j^2, {i, 1, 3}, {j, 1, 3}]) // MatrixForm
```

Out[52]//MatrixForm=

$$\begin{pmatrix} 0 & -3 & -8 \\ 3 & 0 & -5 \\ 8 & 5 & 0 \end{pmatrix}$$

```
In[53]:= (B = Table[i - j^2, {i, 1, 3}, {j, 1, 3}]) // MatrixForm
```

Out[53]//MatrixForm=

$$\begin{pmatrix} 0 & -3 & -8 \\ 1 & -2 & -7 \\ 2 & -1 & -6 \end{pmatrix}$$

Podpunkt 2.

```
In[69]:= Det[A]
```

Out[69]= 0

```
In[70]:= Transpose[A] // MatrixForm
```

Out[70]//MatrixForm=

$$\begin{pmatrix} 0 & 3 & 8 \\ -3 & 0 & 5 \\ -8 & -5 & 0 \end{pmatrix}$$

Podpunkt 3.

```
In[60]:= B.A // MatrixForm
```

Out[60]//MatrixForm=

$$\begin{pmatrix} -73 & -40 & 15 \\ -62 & -38 & 2 \\ -51 & -36 & -11 \end{pmatrix}$$

Podpunkt 4.

```
In[67]:= (C = A.B) // MatrixForm
```

Out[67]//MatrixForm=

$$\begin{pmatrix} -19 & 14 & 69 \\ -10 & -4 & 6 \\ 5 & -34 & -99 \end{pmatrix}$$

```
In[68]:= Max[C]
```

Out[68]= 69