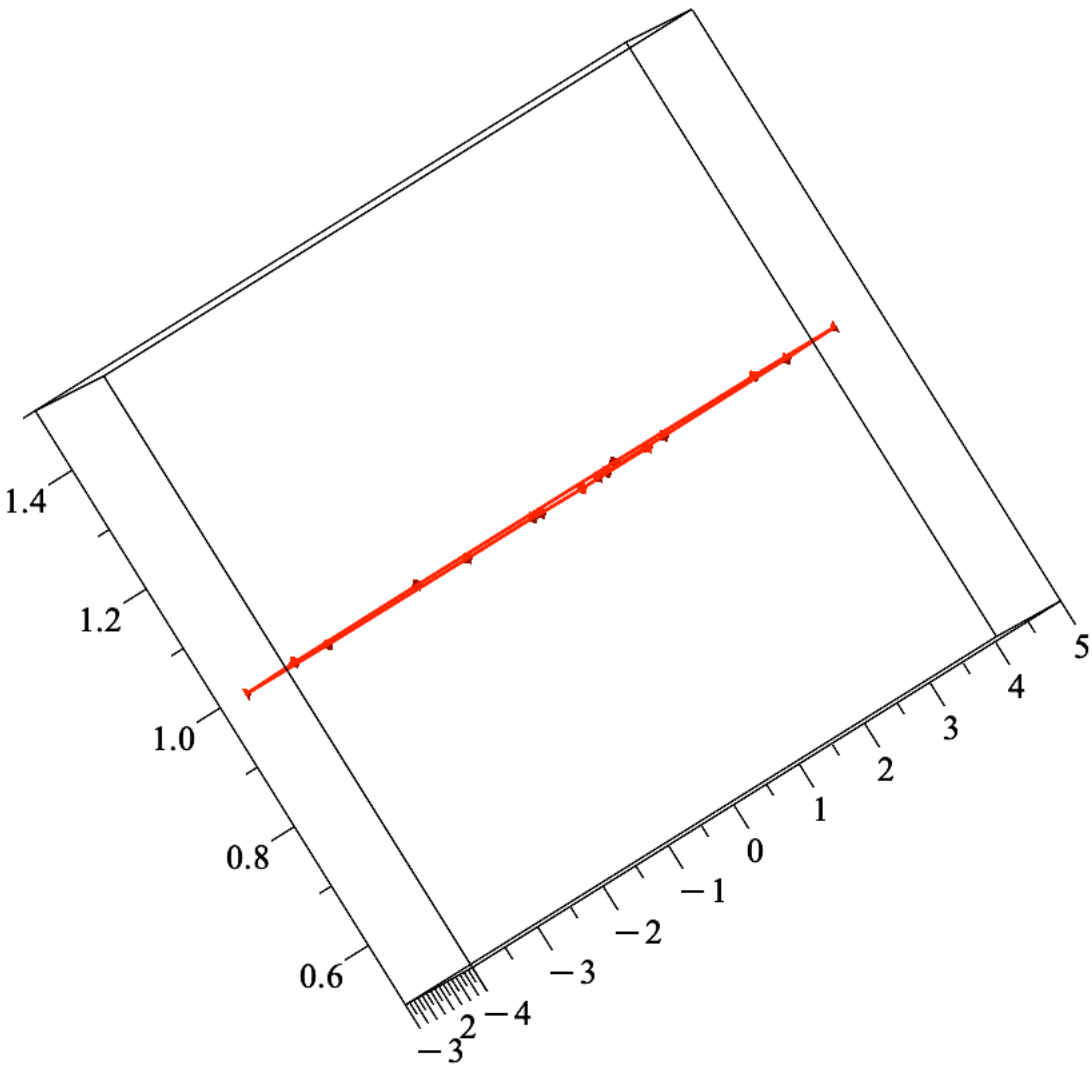


```

> with(LinearAlgebra): with(plots): interface(rtablesize=40):
> pumpkin_h := Matrix([[0, -1, -3, -4, -3, -1, 2, 4, 5, 4, 2, 1, 1,
1.5, 0.5, 0, 0], [3, 3, 2, 0, -2, -3, -3, -2, 0, 2, 3, 3, 4, 5, 5, 4, 3],
[1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]]);
pumpkin_h := 
$$\begin{bmatrix} 0 & -1 & -3 & -4 & -3 & -1 & 2 & 4 & 5 & 4 & 2 & 1 & 1 & 1.5 & 0.5 & 0 & 0 \\ 3 & 3 & 2 & 0 & -2 & -3 & -3 & -2 & 0 & 2 & 3 & 3 & 4 & 5 & 5 & 4 & 3 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \quad (1)$$

> plot1:=pointplot3d(pumpkin_h, style=pointline, color="Red",
thickness=3);

```



```

> LinearTransformation:=Matrix([[1,0,-7],[0,1,-7],[0,0,1]]);

```

$$\text{LinearTransformation} := \begin{bmatrix} 1 & 0 & -7 \\ 0 & 1 & -7 \\ 0 & 0 & 1 \end{bmatrix} \quad (2)$$

```
> plot2:=pointplot3d(LinearTransformation.pumpkin_h, style=pointline,  
color="Blue");  
display(plot1,plot2);
```

