```
v1 = {-8, 7, 6, 5, -7};

v2 = {8, -7, -9, -5, 7};

v3 = {-8, 7, 4, 5, -7};

v4 = {1, 4, 9, 6, -7};

v5 = {-9, 3, -4, -1, 0}
```

```
{-9, 3, -4, -1, 0}
```

```
MatrixForm[{v1, v2, v3, v4, v5}]
```

$$\begin{pmatrix} -8 & 7 & 6 & 5 & -7 \\ 8 & -7 & -9 & -5 & 7 \\ -8 & 7 & 4 & 5 & -7 \\ 1 & 4 & 9 & 6 & -7 \\ -9 & 3 & -4 & -1 & 0 \end{pmatrix}$$

```
MatrixForm[Transpose[{v1, v2, v3, v4, v5}]]
```

$$\begin{pmatrix} -8 & 8 & -8 & 1 & -9 \\ 7 & -7 & 7 & 4 & 3 \\ 6 & -9 & 4 & 9 & -4 \\ 5 & -5 & 5 & 6 & -1 \\ -7 & 7 & -7 & -7 & 0 \end{pmatrix}$$

```
MatrixForm[RowReduce[Transpose[{v1, v2, v3, v4, v5}]]]
```

$$\begin{pmatrix} 1 & 0 & \frac{5}{3} & 0 & \frac{4}{3} \\ 0 & 1 & \frac{2}{3} & 0 & \frac{1}{3} \\ 0 & 0 & 0 & 1 & -1 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$

```
v3 - (5 / 3) v1 - (2 / 3) v2
```

```
{0, 0, 0, 0, 0}
```

```
v5 - (4 / 3) v1 - (1 / 3) v2 + v4
```

```
{0, 0, 0, 0, 0}
```

```
MatrixForm[RowReduce[Transpose[{v1, v2, v4}]]]
```

$$\begin{pmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix}$$