

## Diagonaliser une matrice

Voici un exemple :

```
> with(linalg):
```

```
> A:=matrix(3,3,[1,7,-7,7,1,-7,-7,7,1]);
```

$$A := \begin{bmatrix} 1 & 7 & -7 \\ 7 & 1 & -7 \\ -7 & 7 & 1 \end{bmatrix}$$

```
> jordan(A, 'P');
```

$$\begin{bmatrix} -6 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 8 \end{bmatrix} = P^{-1}AP$$

```
> print(P);
```

$$\begin{bmatrix} 1 & -1 & 1 \\ 0 & -1 & 1 \\ 1 & -1 & 0 \end{bmatrix} = P$$