Maple Linear System Solver

The College of William and Mary has a university-wide license for MAPLE 11 on college-owned computers.

```
> restart:
> # This file calculates the currents in the Physics 252 Week 2
  course notes.
> with(linalg):
Warning, new definition for norm
Warning, new definition for trace
> A:=matrix([[1,1,-1],[R1,0,R3],[0,R2,R3]]);
```

$$A := \begin{bmatrix} 1 & 1 & -1 \\ R1 & 0 & R3 \\ 0 & R2 & R3 \end{bmatrix}$$

```
> B:=vector([0,V1,V2]);
```

$$B := [0, V1, V2]$$

```
> solution:=linsolve(A,B):
> solution[1];
```

$$\frac{R3\,V1 - V2\,R3 + R2\,V1}{R2\,R1 + R2\,R3 + R1\,R3}$$

```
> solution[2];
```

$$\frac{-R3\,V1 + R1\,V2 + V2\,R3}{R2\,R1 + R2\,R3 + R1\,R3}$$

```
> solution[3];
```

$$\frac{R1\,V2 + R2\,V1}{R2\,R1 + R2\,R3 + R1\,R3}$$

```
>
```