

In [1]:

```
A=matrix([[1,1,2],[2,4,-3],[3,6,-5]])  
show(A)
```

Out[1]:

$$\begin{pmatrix} 1 & 1 & 2 \\ 2 & 4 & -3 \\ 3 & 6 & -5 \end{pmatrix}$$

In [2]:

```
b=vector([9,1,0]).column()  
show(b)
```

Out[2]:

$$\begin{pmatrix} 9 \\ 1 \\ 0 \end{pmatrix}$$

In [3]:

```
Ab=A.augment(b)
```

In [4]:

```
show(Ab)
```

Out[4]:

$$\begin{pmatrix} 1 & 1 & 2 & 9 \\ 2 & 4 & -3 & 1 \\ 3 & 6 & -5 & 0 \end{pmatrix}$$

In [5]:

```
show(Ab.rref())
```

Out[5]:

$$\begin{pmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & 3 \end{pmatrix}$$

In [0]: