

In [1]:

```
var('x,y,z,w')  
show(solve([x+2*y+z-w==1, x+2*y+5*z+w==2, x+2*y-3*z-3*w==0],[x,y,z,w]))
```

Out[1]:

$$\left[\left[x = \frac{3}{2} r_1 - 2 r_2 + \frac{3}{4}, y = r_2, z = -\frac{1}{2} r_1 + \frac{1}{4}, w = r_1 \right] \right]$$

In [0]: