In[64]:=
```
sigma = 10;
r = 28;
b = 8/3;
jacobian[x_, y_, z_] := {
  {-sigma, sigma, 0},
  {r - z, -1, -x},
  {y, x, -b}
}

Eigenvalues[N[jacobian[0, 0, 0]]]
Eigenvalues[N[jacobian[Sqrt[72], Sqrt[72], 27]]]
Eigenvalues[N[jacobian[-Sqrt[72], -Sqrt[72], 27]]]
```

Out[68]=
$$\{-22.8277, 11.8277, -2.66667\}$$

Out[69]=
$$\{-13.8546 + 0.\,i, 0.0939556 + 10.1945\,i, 0.0939556 - 10.1945\,i\}$$

Out[70]=
$$\{-13.8546 + 0.\,i, 0.0939556 + 10.1945\,i, 0.0939556 - 10.1945\,i\}$$