

```
sol = DSolve[{a'[t] == a[t] / 9, b'[t] == Sin[t] * b[t], a[0] == -1, b[0] == 1}, {a, b}, t] //
FullSimplify // Flatten
Plot[Evaluate[{a[t], b[t]} /. sol], {t, 0, 10}, WorkingPrecision -> 20]
```

Out[38]=  $\{a \rightarrow \text{Function}[\{t\}, -e^{t/9}], b \rightarrow \text{Function}[\{t\}, e^{1-\cos[t]}]\}$

