

```

DSolve[
{  

  D[g[t, a], t] == h (a - b) D[g[t, a], a],  

  g[0, a] == a  

},  

g[t, a],  

{t, a}  

]

```

$$\left\{ \left\{ g[t, a] \rightarrow b + a e^{ht} - b e^{ht} \right\} \right\}$$