

In[1]:= **Solve** $\left[\mathbf{J} == \frac{\mathbf{E}^{\mathbf{x}} - 1}{\mathbf{x}}, \mathbf{x}\right]$

Solve::ifun : Inverse functions are being used by Solve, so  
some solutions may not be found; use Reduce for complete solution information. >>

Out[1]=  $\left\{\left\{\mathbf{x} \rightarrow \frac{-1 - \mathbf{J} \text{ProductLog}\left[-\frac{\mathbf{e}^{-1/\mathbf{J}}}{\mathbf{J}}\right]}{\mathbf{J}}\right\}\right\}$

In[2]:= **? ProductLog**

ProductLog[z] gives the principal solution for  $w$  in  $z = we^w$ .

ProductLog[k, z] gives the  $k^{\text{th}}$  solution. >>