74. The line has x-intercept at $x = e^0 = 1$. When $x = e^a$, $y = \ln e^a = a$. Therefore, using the point-slope equation, we have $y - 0 = \dfrac{a - 0}{e^a - 1}(x - 1)$ $\Leftrightarrow$ $y = \dfrac{a}{e^a - 1}(x - 1)$.