

$$\begin{aligned}
 \text{est:} & \quad \frac{e^{1-z+0z} - e^{1z}}{0z-10} = e^{1-z} \frac{1 - (z+0z)}{0z} - \frac{1}{1-z} \\
 & = \frac{e^{1-z}}{0z-10} \frac{1-z-1+z+0z}{0z(1-(z+0z))(1-z)} \\
 & = \frac{e^{1-z}}{0z-10} \frac{0z}{0z(1-(z+0z))(1-z)} \\
 & = \frac{e^{1-z}}{0z-10} \frac{1}{(1-(z+0z))(1-z)} \\
 & = \frac{1}{(1-z)^2}
 \end{aligned}$$

En utilisant maintenant l'une des règles de dérivation, on obtient :

$$\begin{aligned}
 \frac{d}{dz} \frac{1}{1-z} & = \frac{0(1-z) - (-1)(1)}{(1-z)^2} \\
 & = \frac{1}{(1-z)^2}
 \end{aligned}$$

$$\begin{aligned}
 \text{est:} & \quad \frac{e^{1-z+0z} - e^{1z}}{0z-10} = e^{1-z} \frac{1 - (z+0z)}{0z} - \frac{1}{1-z} \\
 & = \frac{e^{1-z}}{0z-10} \frac{1-z-1+z+0z}{0z(1-(z+0z))(1-z)} \\
 & = \frac{e^{1-z}}{0z-10} \frac{0z}{0z(1-(z+0z))(1-z)} \\
 & = \frac{e^{1-z}}{0z-10} \frac{1}{(1-(z+0z))(1-z)} \\
 & = \frac{1}{(1-z)^2}
 \end{aligned}$$

En utilisant maintenant l'une des règles de dérivation, on obtient :

$$\begin{aligned}
 \frac{d}{dz} \frac{1}{1-z} & = \frac{0(1-z) - (-1)(1)}{(1-z)^2} \\
 & = \frac{1}{(1-z)^2}
 \end{aligned}$$