

$$\begin{aligned}
S\ K\ K &= (\lambda x\ y\ z.x\ z\ (y\ z))\ (\lambda x\ y.x)\ (\lambda x\ y.x) = (\lambda x\ y\ z.x\ z\ (y\ z))\ K\ K = \\
&(\lambda y\ z.\ K\ z\ (y\ z))\ K = (\lambda z.\ K\ z\ K\ z) = (\lambda z.\ (\lambda x\ y.x)\ z\ (K\ z)) = (\lambda z.z) = I
\end{aligned}$$