# Exercise 9

Use $-1 = (-1, 0)$ and $z = (x, y)$ to show that $(-1)z = -z$.

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**Solution**

$$
\begin{aligned}
(-1)z &= (-1, 0)(x, y) \\
&= (-x - 0, 0 - y) \\
&= (-x, -y) \\
&= -x - iy \\
&= -(x + iy) \\
&= -z
\end{aligned}
$$