

**University of Nebraska-Lincoln**  
**Electronic Circuits: Quiz 1**

**January 30, 2026**

**Name:** \_\_\_\_\_

**Total Points: 10**

1. **(10 points)** Consider the frequency response

$$H(e^{j\omega}) = 1 + e^{-j\omega}$$

Find the **real part** of  $H(e^{j\omega})$  as a function of  $\omega$ . **Note:** don't leave any  $j$ 's,  $i$ 's,  $\sqrt{-1}$ 's, etc.