## Mastery Check

1) Write the logarithmic equation in exponential form.

$$
\log \frac{1}{1,000}=-3
$$

2) Write the exponential equation in logarithmic form.

$$
9^{\frac{3}{2}}=27
$$

3) Evaluate.

$$
\mathbf{f}(\mathbf{x})=\log _{2} \mathbf{x}, \quad \mathbf{x}=\mathbf{3 2}
$$

4) Simplify.
$\ln \frac{1}{\mathrm{e}}$
