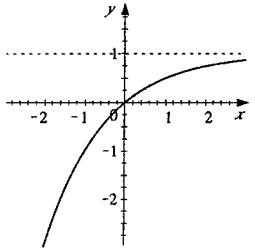
34. $f(x) = 1 - 2^{-x}$

The graph of f is obtained by reflecting the graph of $y = 2^x$ about the y-axis, reflecting about the x-axis, and then shifting upward 1 unit.

Domain: $(-\infty, \infty)$

Range: $(1, \infty)$

Asymptote: $y = 1$



36. $y = 2^{-|x|}$

Note that $y = \begin{cases} 2^{-x} & x \geq 0 \\ 2^{x} & x < 0. \end{cases}$

The graph of $y = 2^{-|x|}$ is obtained by reflecting the part of the graph of $y = 2^x$ for $x < 0$ about the y-axis, thus giving the portion of the graph for $x \geq 0$.

Domain: $(-\infty, \infty)$

Range: $(0, 1]$

Asymptote: $y = 0$