33. Since the point $(5, 1)$ is on the graph, we have $1 = \log_a 5 \quad \Leftrightarrow \quad a^1 = 5$. Thus the function is $y = \log_5 x$.

35. Since the point $\left(3, \frac{1}{2}\right)$ is on the graph, we have $\frac{1}{2} = \log_a 3 \quad \Leftrightarrow \quad a^{1/2} = 3 \quad \Leftrightarrow \quad a = 9$. Thus the function is $y = \log_9 x$.