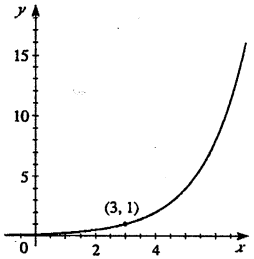
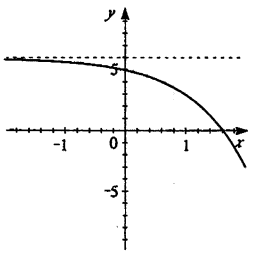
24. $g(x) = 2^{x-3}$

The graph of g is obtained by shifting the graph of $y = 2^x$ to the right 3 units.
Domain: $(-\infty, \infty)$
Range: $(0, \infty)$
Asymptote: $y = 0$



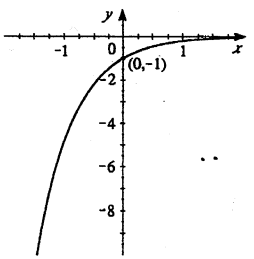
26. $h(x) = 6 - 3^x$

The graph of h is obtained by reflecting the graph of $y = 3^x$ about the x-axis and shifting upward 6 units.
Domain: $(-\infty, \infty)$
Range: $(-\infty, 6)$
Asymptote: $y = 6$



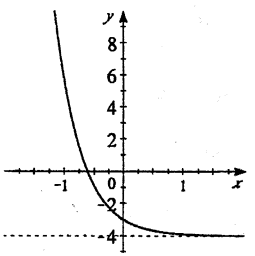
28. $f(x) = -\left(\frac{1}{5}\right)^x$

Note that $f(x) = -\left(\frac{1}{5}\right)^x = -5^{-x}$. So the graph of f is obtained by reflecting the graph of $y = 5^x$ about the y-axis and about the x-axis.
Domain: $(-\infty, \infty)$
Range: $(-\infty, 0)$
Asymptote: $y = 0$



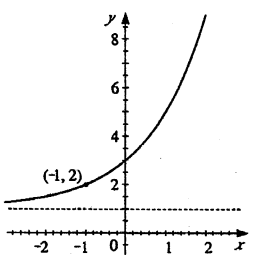
30. $f(x) = 10^{-x} - 4$

The graph of f is obtained by reflecting the graph of $y = 10^x$ about the y-axis and shifting downward 4 units.
Domain: $(-\infty, \infty)$
Range: $(-4, \infty)$
Asymptote: $y = -4$



32. $y = 1 + 2^{x+1}$

The graph of $y = 1 + 2^{x+1}$ is obtained by shifting the graph of $y = 2^x$ to the left 1 unit and then upward 1 unit.
Domain: $(-\infty, \infty)$
Range: $(1, \infty)$
Asymptote: $y = 1$



54. Since $f(40) = 2^{40} = 1099511627776$, it would take a sheet of paper 4 inches by 1099511627776 inches. Since there are 12 inches in every foot and 5,280 feet in ever mile, 1099511627776 inches $\approx$ 1.74 million miles. So the dimensions of the sheet of paper required are 4 inches by about 1.74 million miles.