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

The graph of q is obtained by shifting the graph of $u = 2^x$ 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

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

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





