8. $j(-1) = \left(\frac{1}{4}\right)^{-1} = 4$

$j(5) = \left(\frac{1}{4}\right)^{5} = \frac{1}{1024}$

16. $f(x) = \left(\frac{1}{4}\right)^{x}$ is an exponential function with a base between 0 and 1.

$g(x) = \left(\frac{1}{4}\right)^{-x}$ is the graph of $f(x)$ reflected across the y-axis.

$h(x) = \left(\frac{1}{4}\right)^{x-2}$ is the graph of $f(x)$ moved 2 units to the right.

$k(x) = 3\left(\frac{1}{4}\right)^{x}$ is the graph of $f(x)$ stretched vertically by a factor of 3.

a. $k(x)$ **b.** $f(x)$ **c.** $g(x)$ **d.** $h(x)$

27. Shift the graph of *f* horizontally to the right 2 units.

32. Shrink the graph of *f* vertically towards the *x*-axis by a factor of $\frac{1}{2}$.

34. Shift the graph of *f* horizontally 3 units to the right, and then shift this graph vertically upward 1 unit.

60. $\cosh(x) = \dfrac{e^{x} + e^{-x}}{2}$ is an even function. That is, prove $\cosh(-x) = \cosh(x)$.

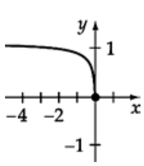
Proof: $\cosh(x) = \dfrac{e^{x} + e^{-x}}{2}$

$\cosh(-x) = \dfrac{e^{-x} + e^{x}}{2}$

$\cosh(-x) = \dfrac{\left(e^{x} - e^{-x}\right)}{2}$

$\cosh(-x) = F(x)$

66.



domain: $(-\infty, 0]$