Figure 1.1.4 (p. 4)
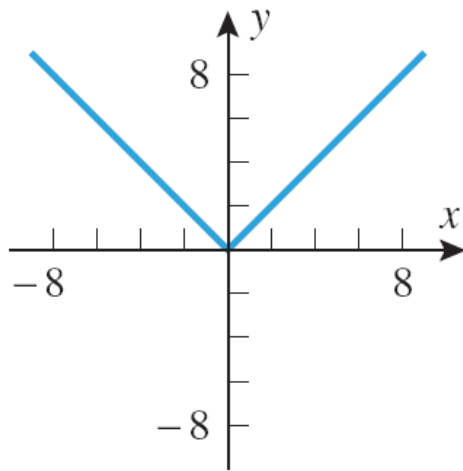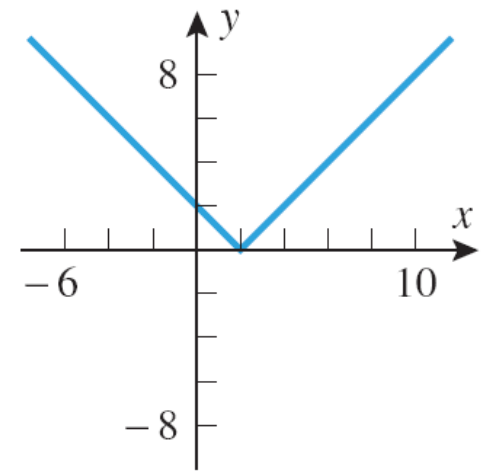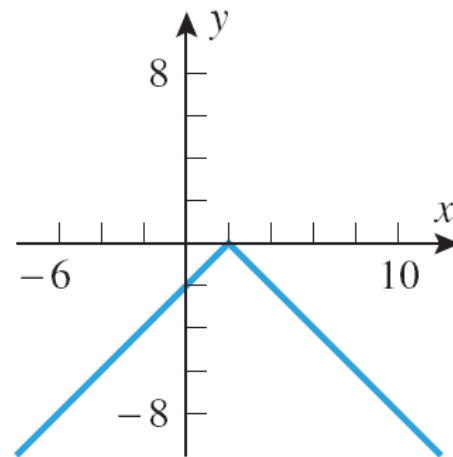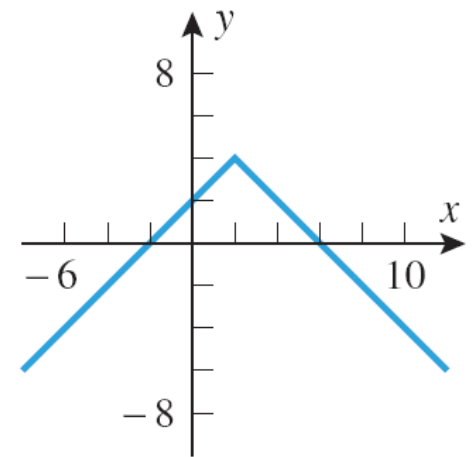
$y = |x|$

$y = |x - 2|$

$y = -|x - 2|$

$y = 4 - |x - 2|$

Figure 1.3.7 (p. 34)

Table 1.3.4
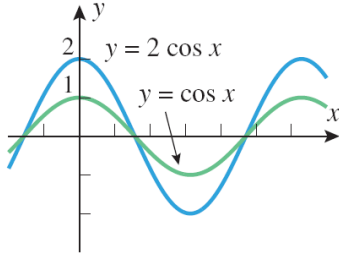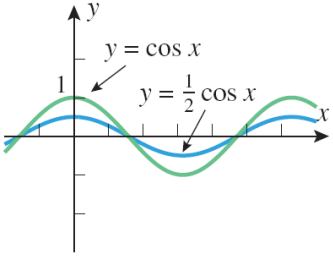
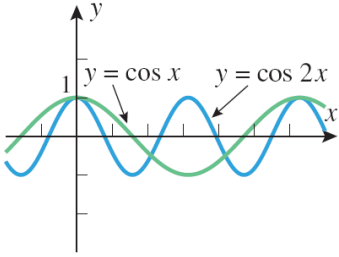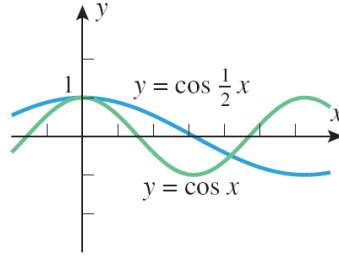| OPERATION ON $y = f(x)$	Multiply $f(x)$ by c $(c > 1)$	Multiply $f(x)$ by c $(0 < c < 1)$	Multiply x by c $(c > 1)$	Multiply x by c $(0 < c < 1)$
NEW EQUATION	$y = cf(x)$	$y = cf(x)$	$y = f(cx)$	$y = f(cx)$
GEOMETRIC EFFECT	Stretches the graph of $y = f(x)$ vertically by a factor of c	Compresses the graph of $y = f(x)$ vertically by a factor of $1/c$	Compresses the graph of $y = f(x)$ horizontally by a factor of c	Stretches the graph of $y = f(x)$ horizontally by a factor of $1/c$
EXAMPLE				

Table 1.3.4 (p. 34)
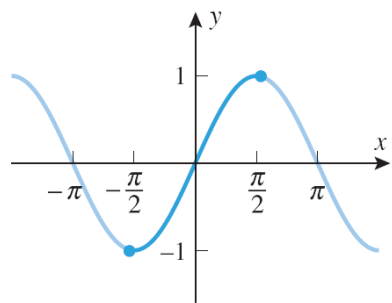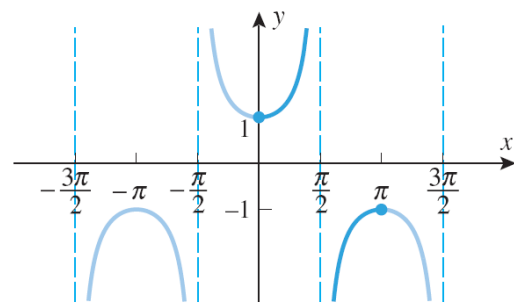
$y = \sin x$
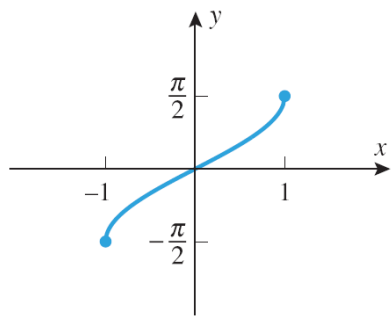$-\dfrac{\pi}{2} \le x \le \dfrac{\pi}{2}$
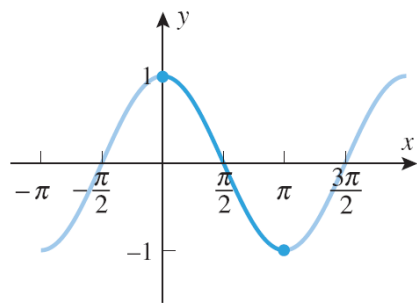
$y = \cos x$
$0 \le x \le \pi$
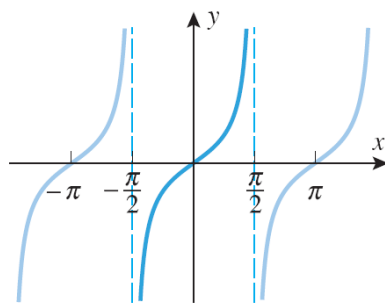
$y = \tan x$
$-\dfrac{\pi}{2} < x < \dfrac{\pi}{2}$
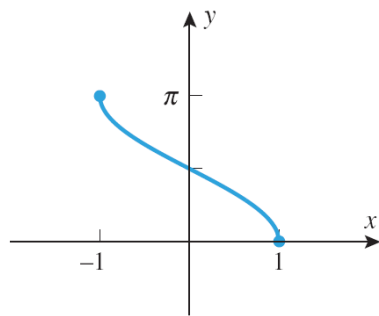
$y = \sec x$
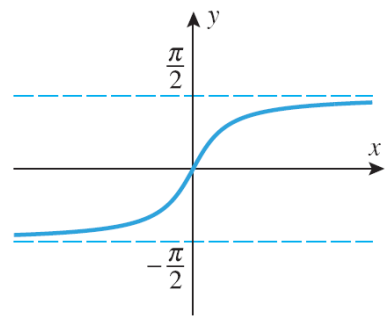$0 \le x \le \pi,\ x \ne \dfrac{\pi}{2}$

$y = \sin^{-1} x$

$y = \cos^{-1} x$

$y = \tan^{-1} x$
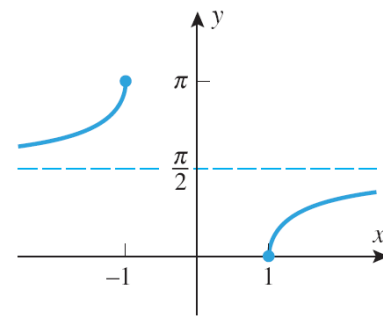
$y = \sec^{-1} x$

Figure 1.5.13 (p. 58)

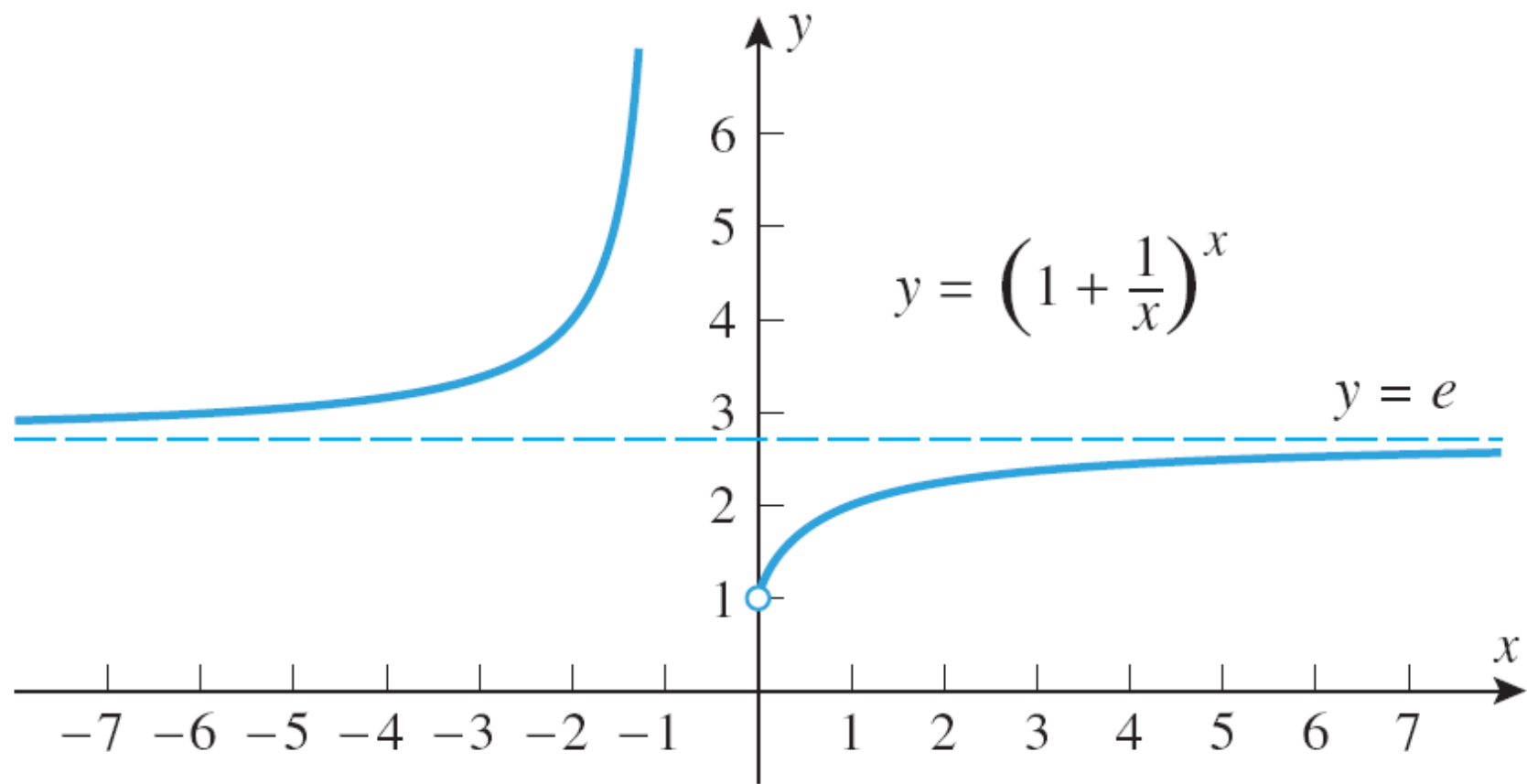$$y = \left(1 + \frac{1}{x}\right)^x$$

$$y = e$$

Figure 1.6.6 (p. 68)

1.6.2 THEOREM (*Algebraic Properties of Logarithms*). $b > 0, b \neq 1, a > 0,$ $c > 0,$ *and* r *is any real number, then:*

(a) $\log_b(ac) = \log_b a + \log_b c$ \qquad Product property

(b) $\log_b(a/c) = \log_b a - \log_b c$ \qquad Quotient property

(c) $\log_b(a^r) = r \log_b a$ \qquad Power property

(d) $\log_b(1/c) = -\log_b c$ \qquad Reciprocal property

Theorem 1.6.2 (p. 70)