2.7, #9, 12, & 17: Determine whether each graph depicts an symmetric with respect to the x-axis, y-axis, origin, or none of these.

(a) $x = -|y| - 4$

(b) $|x| + |y| = 4$

(c) $y = \frac{1}{2}x - 3$.

2.7, #34,36,44,46: Determine whether the following functions are even, odd, or neither. If neither, give counterexamples.

(a) $p(x) = -|x| + 12x^{10} + 5$

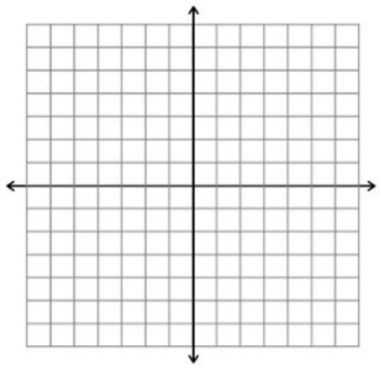
(b) $m(x) = -4x^5 + 2x^3 + x$

(c) $g(x) = \frac{x^3}{2(x-1)^3}$

(d) $w(x) = \frac{-\sqrt[3]{x}}{x^2+1}$

2.7, #66: Graph the function s given by

$$s(x) = \begin{cases} -x - 1 & \text{for } x \geq 1 \\ \sqrt{x+1} & \text{for } x > -1 \end{cases}$$



2.8, Problem: Let $a(x) = \frac{x-4}{x^2-25}$, $b(x) = \frac{x+5}{16-4x}$, and $c(x) = \sqrt{x-5}$. Find the formulas for the following functions and indicate their domains in interval notation.

(a) $(a \cdot b)(x)$

(b) $c^2(x) = (c \cdot c)(x)$

(c) $\left(\frac{a}{b}\right)(x)$

(d) $(a + c)(x)$

2.8, Problem: Let $f(x) = x^3 - 4x$, $g(x) = \frac{3}{x-4}$, $h(x) = \frac{4}{x^2-8}$, and $k(x) = x^2$. For parts (b) through (d), find the formulas for the following functions and indicate their domains in interval notation.

(a) Find $(f \circ f)(2)$.

(b) $(k \circ g)(x)$

(c) $(g \circ k)(x)$

(d) $(g \circ h)(x)$

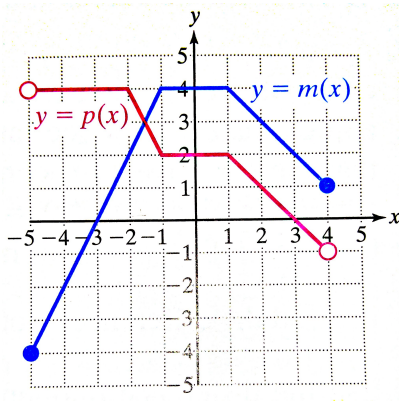
2.8, #88: The base cost to buy tickets online for a Slayer concert is \$60 per ticket.

(a) Write a formula for the function C representing the base cost for x tickets.

(b) Sales tax is 7.5% and, regardless of the number of tickets purchased, each sale has an \$8 processing fee. Write a function T representing the total cost for a purchase with base cost of a dollars.

(c) Find a formula for $T \circ C$ and interpret the meaning of $(T \circ C)(x)$.

2.8, #94: Let $h(x) = \sqrt[4]{9x-5}$. Find two functions f and g such that $h = f \circ g$.



2.8, #102: Find the following function values, if they exist, using the graph on the left.

(a) $(m+p)(1)$

(b) $(p-m)(-4)$

(c) $\left(\frac{m}{p}\right)(3)$

(d) $(m \cdot p)(3)$

(e) $(m \circ p)(0)$

(f) $(p \circ m)(0)$

(g) $p(m(-4))$

2.8, #104: Suppose that the graphs of two functions f and g are given, respectively by graph$(f) = \{(2,4), 6, -1), (4,-2), (0,3), (-1,6)\}$ and graph$(g) = \{(4,3), (0,6), (5,7), (6,0)\}$. Find

(a) $(g \cdot f)(0)$

(b) $(g \circ f)(0)$