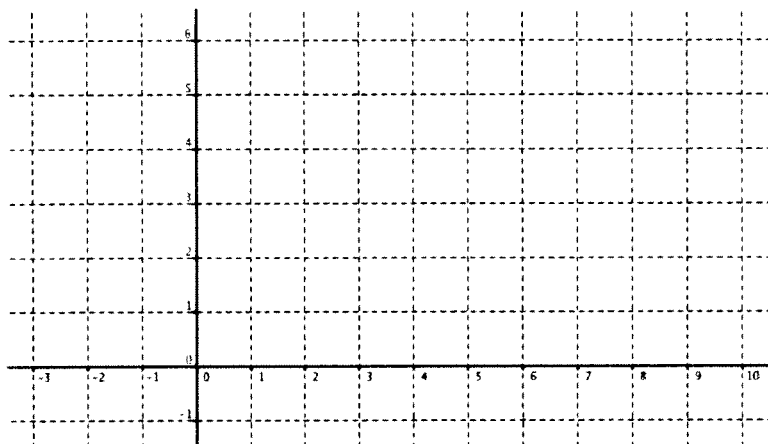
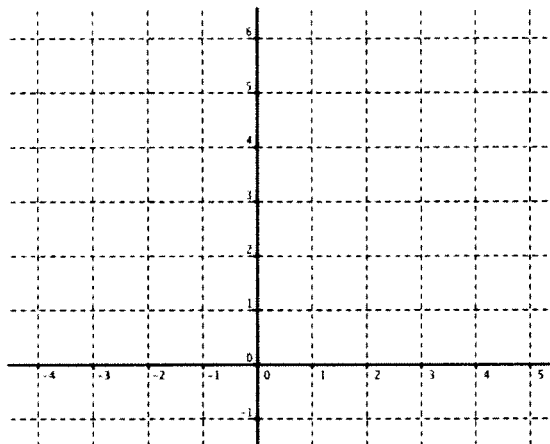


1. Graph the following functions by applying transformations to the base graph  $f(x) = \sqrt{x}$ .

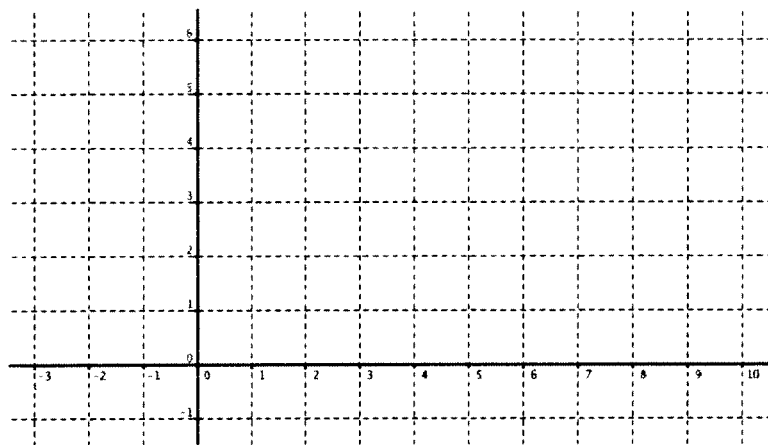
$$g(x) = -3\sqrt{x-1} + 5$$



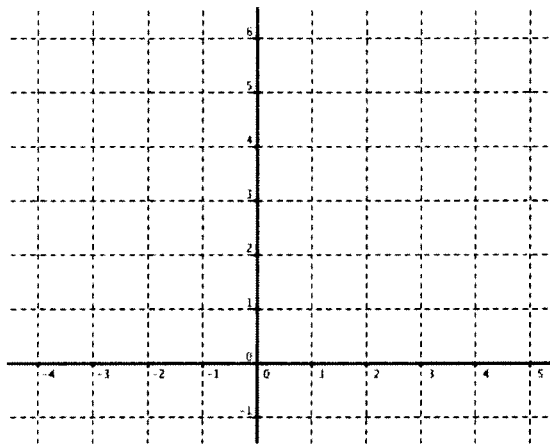
$$h(x) = \sqrt{2(x+4)}$$



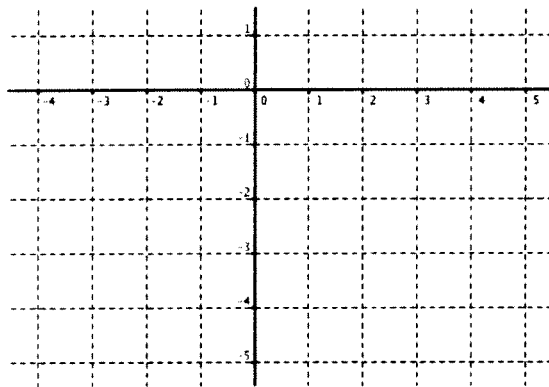
$$m(x) = \sqrt{\frac{x+1}{2}} + 3$$



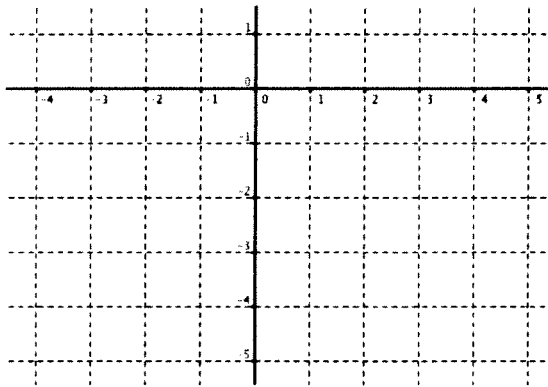
$$n(x) = \sqrt{-\frac{1}{2}(x-5)}$$



$$p(x) = -\sqrt{2x+8}$$

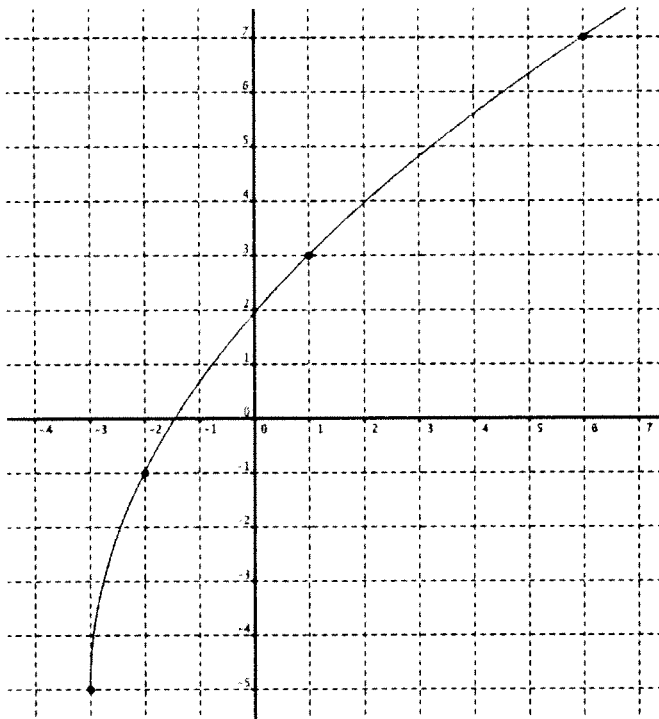


$$q(x) = \sqrt{4-x} - 3$$

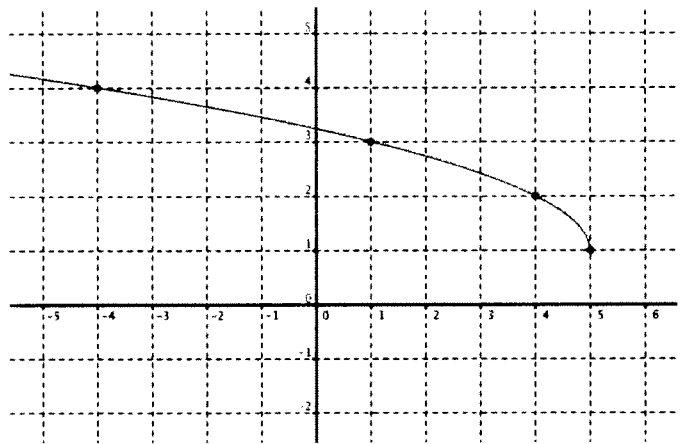


2. Write an equation for each of the functions below, transformed from the base graph  $f(x) = \sqrt{x}$ .

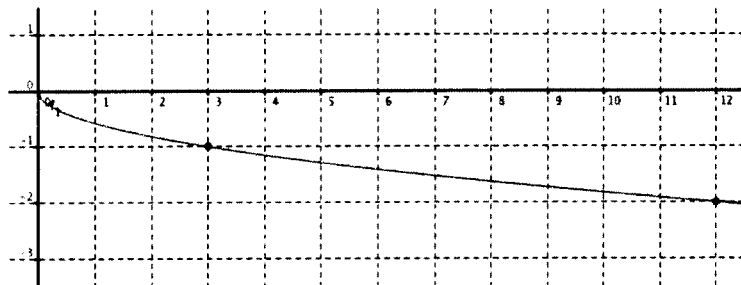
a)



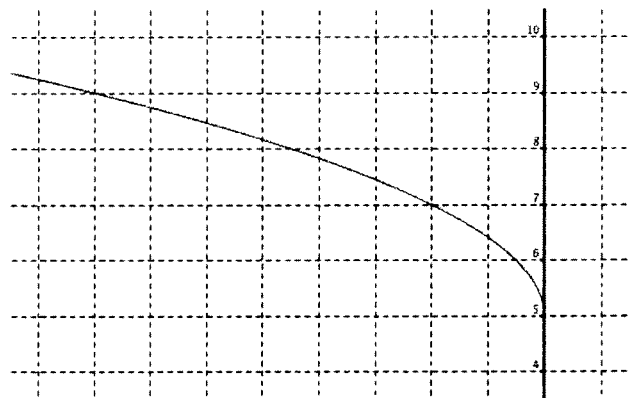
b)



c)



d)



3. Determine an equation for the inverse of each function.

a)  $g(x) = 3x + 6$

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

c)  $g(x) = 2(x - 3)^2$

d)  $h(x) = \frac{x+6}{3}$