Algebra I

Function Notation Worksheet

1. Evaluate the following expressions given the functions below:

$g(x) = -3x + 1$ $f(x) = x^2 + 7$ $h(x) = \dfrac{12}{x}$ $j(x) = 2x + 9$

     a. $g(10) =$

     b. $f(3) =$

     c. $h(-2) =$

     d. $j(7) =$

     e. $h(a)$

     f. Find x if $g(x) = 16$

     g. Find x if $h(x) = -2$

     h. Find x if $f(x) = 23$

     i. CHALLENGE! (in other words, optional) $g(b+c)$

     j. CHALLENGE! (also optional) $f(h(x))$

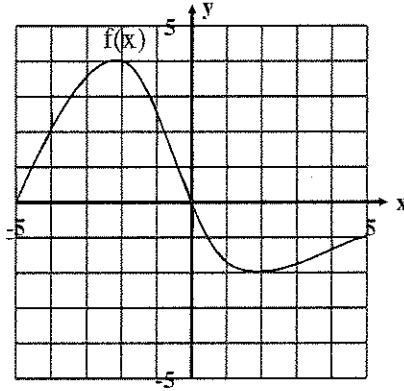**2.** Translate the following statements into coordinate points:

     a. $f(-1) = 1$

     b. $h(2) = 7$

     c. $g(1) = -1$

d. $k(3) = 9$

3. Given this graph of the function $f(x)$:

Find:

a. $f(-4) =$ **b.** $f(0) =$ **c.** $f(3)$ **d.** $f(-5)$

e. x when $f(x) = 2$ **f.** x when $f(x) = 0$