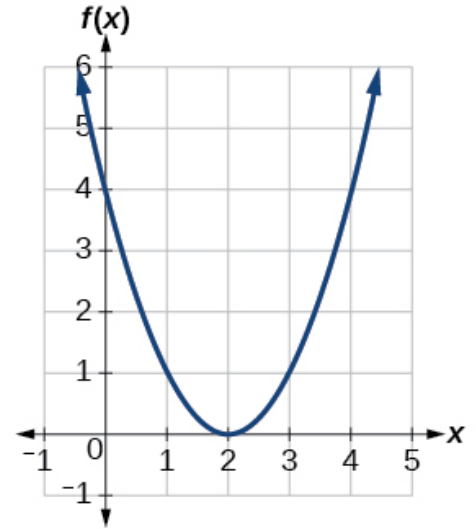


2.2 The Graph of a Function

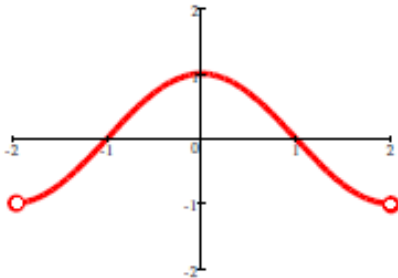
Function notation and graphs

We will now apply function notation to graphs.

EXAMPLE: Given the graph below, evaluate $f(3)$. Also, solve $f(x) = 4$.



EXAMPLE: Use the graph below to answer the following:

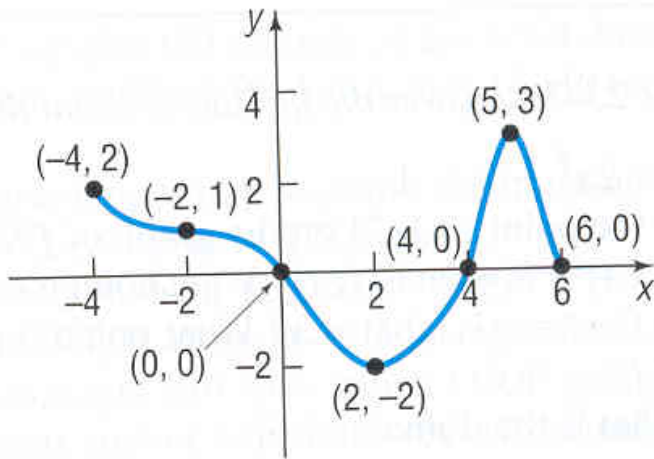


a.) Find the domain

b.) Find the range

c.) Indicate the intercepts

EXAMPLE: Use the graph below to answer the following:



a.) Find $f(-2)$:

b.) Find all x such that $f(x) = 3$

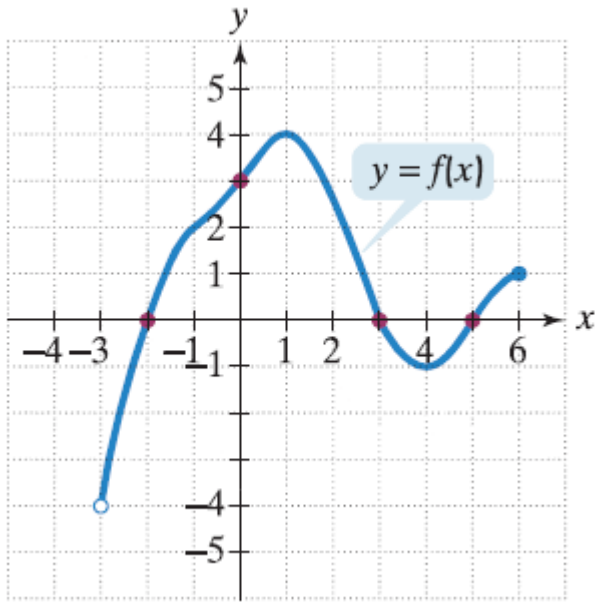
c.) Is $f(3)$ positive or negative?

d.) What is the domain?

e.) What is the range?

f.) For which values is $f(x) > 0$?

EXAMPLE: Use the graph below to answer the following:



a.) Find $f(-1)$:

b.) Find all x such that $f(x) = 0$

c.) Is $f\left(-\frac{3}{2}\right)$ positive or negative?

d.) What is the domain?

e.) What is the range?

f.) Indicate the x and y intercepts.

EXAMPLE: Determine whether the graph below is that of a function by using the vertical-line test. If it is, use the graph to find (a) the domain and range (b) the intercepts, if any (c) any symmetry with respect to the x-axis, y-axis, or the origin.

