Business PreCalculus MATH 1643 Section 004, Spring 2014

Worksheet 13

1- Determine whether each equation defines y as a function of x:

a. $x + y^2 = 8$

b. $y = \frac{x}{\sqrt{x^2-1}}$

2- Let $f(x) = x^2 - 3x + 1$, find:

a. $f(3)$

b. $f(x + h)$

3- Find the domain of each function:

a. $h(x) = \frac{2x}{x^2-1}$

b. $f(x) = 2x^2 - 11$

c. $h(x) = \frac{\sqrt{x+3}}{1-x}$

d. $f(x) = \frac{3}{\sqrt{4-x}}$

4- Let $f(x) = -3x^2 - 12x$, find:

a. all y-intercepts of the graph f.

b. all x-intercepts of the graph f.