Math 103 - Section 2.1 - Functions - From graphs

 You are given the graph of the function f(x). Use the following graph to answer the questions given below.



- a) Find f(2)
- b) Find x when f(x) = -4
- c) What is the y-intercept? Write as an ordered pair.
- d) What are the x-intercepts? Write as ordered pairs.
- e) What is the domain of f? Write in interval notation _____

Write in set builder notation _____

f) What is the range of f? Write in interval notation _____

Write in set builder notation _____

- g) For what values of x is f(x) = 0?
- h) Solve the equation f(x) = 9
- i) What are the zeros of the function?

- 2) Given a graph
 - a) Is it a function? Explain.
 - b) If so, use proper notation to denote the function
 - c) Give domain (interval and set builder notation)
 - d) Give range (interval and set builder notation)
 - e) Give the x-intercept(s). Write as ordered pairs.
 - f) Give y-intercept. Write as ordered pair.
 - g) Give the zeros of the function
 - h) Questions of the type: Given x, find y
 - i) Rephrase question (h) using function notation
 - j) Question of the type: given y, find x
 - k) Rephrase question (j) using function notation
 - 1) Questions of the type: what output corresponds to an input of....
 - m) Questions of the type: what...



Given an equation relating two variables,

- a) Is it a function? Explain.
- b) If so, use proper notation to denote the function
- c) Give y-intercept. Write as ordered pair.
- d) Make up questions of the type: Given x, find y
- e) Rephrase question (h) using function notation
- f) Make up questions of the type: what output corresponds to an input of....
- g) Evaluate the function at an expression