Math 103 - Section 2.1 - Functions - From graphs

1) 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 $\qquad$
Write in set builder notation $\qquad$
f) What is the range of $f$ ?

Write in interval notation $\qquad$
Write in set builder notation $\qquad$
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
l) Questions of the type: what output corresponds to an input of.... m) Questions of the type: what...


Math 103 - Section 2.1 - Functions - From Equations

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

