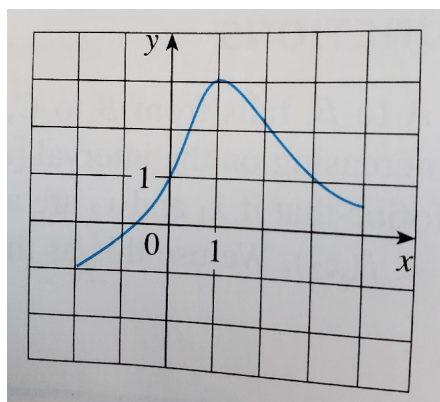


Worksheet 1

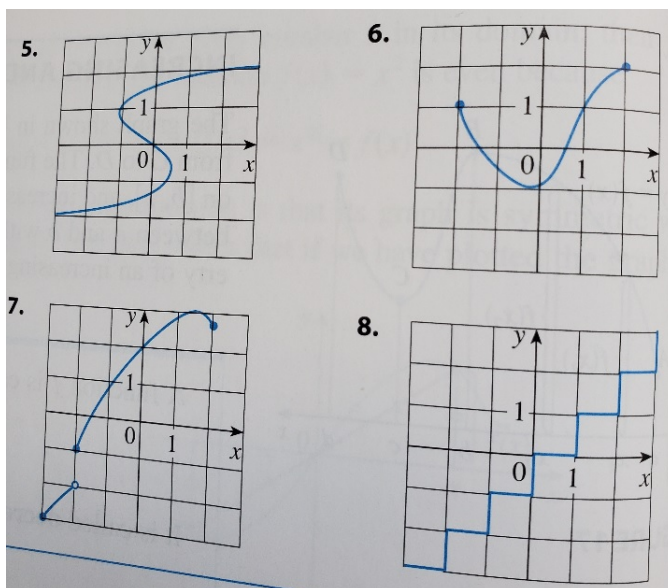
9/27/2022

1. The graph of a function f is given in a figure below (taken from the textbook).

- (a) On what interval is f increasing/decreasing?
- (b) What is $f(2)$?
- (c) What is $f(f(f(1)))$?
- (d) What is the value of x such that $f(x) = 0$?
- (e) Is f an odd or even (or neither of those) function?



2. Which of the following curves is a graph of a function? Explain why.



3. Sketch the graph of a function f given by $f(x) = -x$ if $-3 < x < 0$, $f(x) = x + 1$ if $0 \leq x < 1$, and $f(x) = x^2 + 1$ if $1 < x \leq 2$.