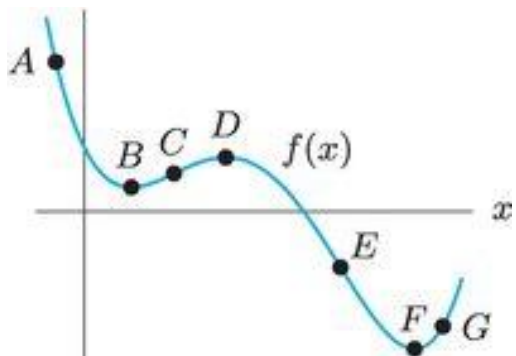practice

Problem 1.

A - The function   is given in the figure below.

At which of the labeled points is

(a) ( ) positive and has a zero slope? _____
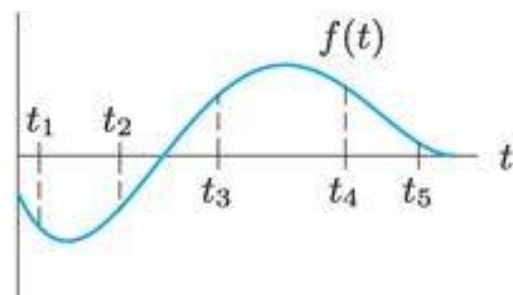
(b) ( ) negative? _____

B - The figure here shows the graph of $f(t)$.

At which of the marked values of t are the following values true?

(a) ( ) > 0   _____

(b) $f(t)$ is increasing   _____

Problem 2

a- We consider the periodic function: $f(x) = -2 - 5\sin(1+4x)$. Find its

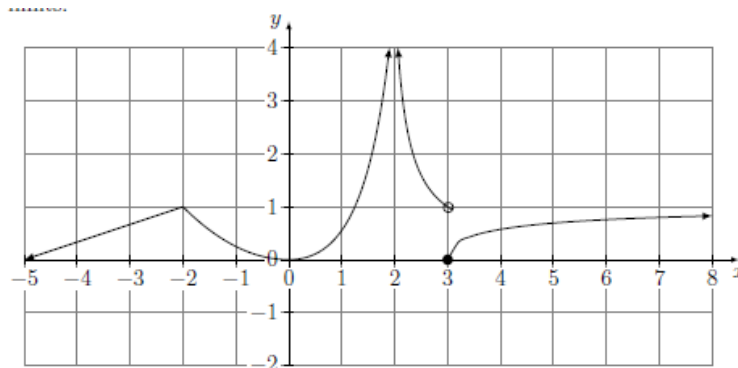amplitude A0 , verttical shift C, phase shift f, and its period T

A0=

T=

C=

f=

b- Consider the following graph of the function f(x).

- Find the limits:

$$\lim_{\to 3^+} f(x)= \qquad \lim_{\to 3^-} f(x)= \qquad \lim_{x \to 3} f(x)=$$

and the domain D

- At which points f is discontinuous