

9. [6 points] Consider a continuous function T with the following properties.

- $T(v)$ is defined for all real numbers v .
- The critical points of $T(v)$ are the four points $v = 3$, $v = 5$, $v = 7$, and $v = 8$. ($T(v)$ has no other critical points.)

Some values of T are shown in the following table:

v	0	3	5	7	8	10
$T(v)$	21	9	13	19	11	21

For each of **a.-f.** below, use the answer blank provided to list all the values v at which $T(v)$ attains the specified global extremum. If there is not enough information provided to give an answer, write “NOT ENOUGH INFO”. If $T(v)$ does not attain the specified global extremum on the specified interval, write “NONE”.

For what value(s) v does $T(v)$ attain its ...

- a. global minimum on the interval $0 \leq v \leq 10$?

Answer: $v =$ 3

- b. global maximum on the interval $0 \leq v \leq 10$?

Answer: $v =$ 0, 10

- c. global minimum on the interval $0 < v < 10$?

Answer: $v =$ 3

- d. global maximum on the interval $0 < v < 10$?

Answer: $v =$ NONE

- e. global minimum on the interval $(-\infty, \infty)$?

Answer: $v =$ 3

- f. global maximum on the interval $(-\infty, \infty)$?

Answer: $v =$ NONE