

d. Identify two time intervals where the one interval's rate of change is greater than the other.

0 to 1 sec has greater rate of change than 1 to 2 sec.

e. Describe the graph by answering the following questions:

Does the graph have any x- or y-intercepts (if so, state coordinates)?

x-intercepts: (0,0) (5,0)

y-intercept: (0,0)

Does the graph have any maximums/minimums (if so, state coordinates)?

max at (2.5, 100)

What is the practical domain of the graph?  $0 \leq x \leq 5$

What is the practical range of the graph?  $0 \leq y \leq 100$

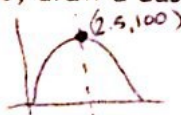
Where is the graph increasing? Where is the graph decreasing?

Increasing from (0,0) to (2.5, 100)

then decreases until (5,0)

Is the graph symmetrical? If so, draw a dashed line on the graph to represent the line of symmetry.

yes!



5. Examine the graph of  $f(x)$ .

The scale on the x and y-axis is 1.

a. What is the theoretical domain of this function?

All reals

b. What is the theoretical range of this function?

$y \geq 2$

c. Find  $f(2) = \underline{3}$   
 $x=2, y=?$

d. If  $f(x) = 5$ , then  $x = \underline{6}$  and  $\underline{-6}$ .  
 $x=?, y=5$

