# Limits and the Derivative Math 102 Section 107 

Krishanu Sankar

September 18, 2017

# Geometric aspects of the derivative 

A

## Geometric aspects of the derivative

A

Q1. At which point is the slope zero?

## Geometric aspects of the derivative



Q1. At which point is the slope zero?
Q2. At how many places on the graph is the slope zero?
A. 1
B. 2
C. 3
D. 4
E. Don't know

## Geometric aspects of the derivative



Q3. At which point does the slope have the greatest absolute value? (E. I'm confused)

## Geometric aspects of the derivative

Q4. If $f^{\prime}(a)=0$, then $x=a$ is either a local maximum, or a local minimum.

A. True B. False C. Other

## Geometric aspects of the derivative

Q5. Given $f^{\prime}(x)$, sketch the original function.


## Geometric aspects of the derivative

Q5. Given $f^{\prime}(x)$, sketch the original function.


## Geometric aspects of the derivative

 Q6. Given $f^{\prime}(x)$, sketch the second derivative, $f^{\prime \prime}(x)$.



## Geometric aspects of the derivative

 Q6. Given $f^{\prime}(x)$, sketch the second derivative, $f^{\prime \prime}(x)$.



