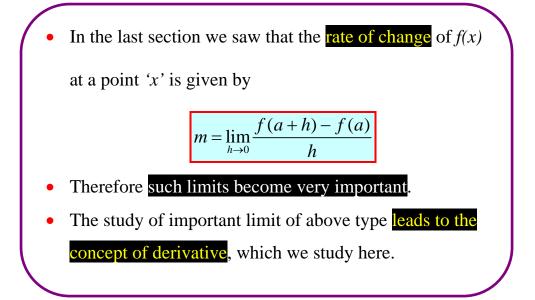
$(2.8-2.9)_{1}$

Section 2.8 *Derivatives* Section 2.9 *The derivative as a function*

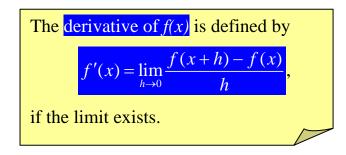
Learning outcomes

After completing this section, you will inshaAllah be able to

- 1. explain the definition of derivative of a function
- 2. find derivatives using definition

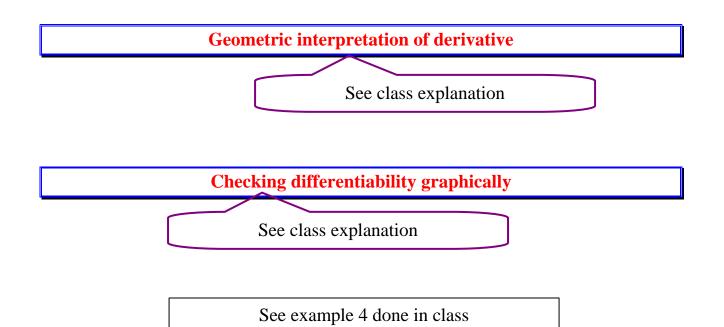


 $(2.8 - 2.9)_{2}$

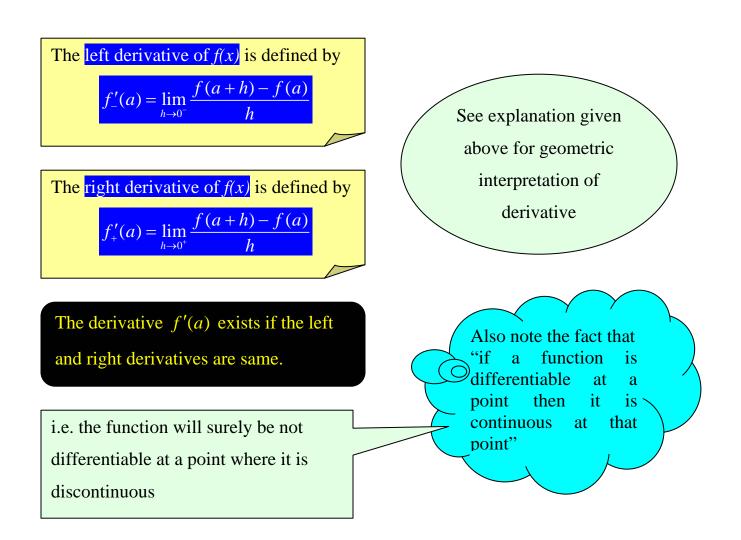


- Another notation: $\frac{dy}{dx}$
- f'(a) means derivative at the point a

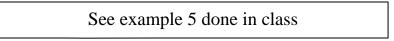
See examples 1, 2, 3 done in class



Left/Right derivative of a function Existence of a derivative



• The next example uses all of these ideas.



End of 2.8, 2.9

 $(2.8 - 2.9)_{2}$