

## True/False

1. Every differentiable function is continuous.
2. Every continuous function is differentiable.
3. The function  $|x|$  is differentiable at  $x=0$ .
4. The function  $|x|$  is continuous at  $x=0$ .
5. The greatest integer function  $[x]$  is  
a continuous function on  $\mathbb{R}$ .