

3. (14 points) Consider the graph of $f'(x)$ below. Given that $f(x)$ is continuous

- (i) At what values of x does $f(x)$ have horizontal tangents? **1, 3, 5**
- (ii) At how many values of x does $f(x)$ have a slope of 1? **4**
- (iii) Sketch a function $f(x)$ which is continuous and has $f'(x)$ (as shown) for its derivative.

