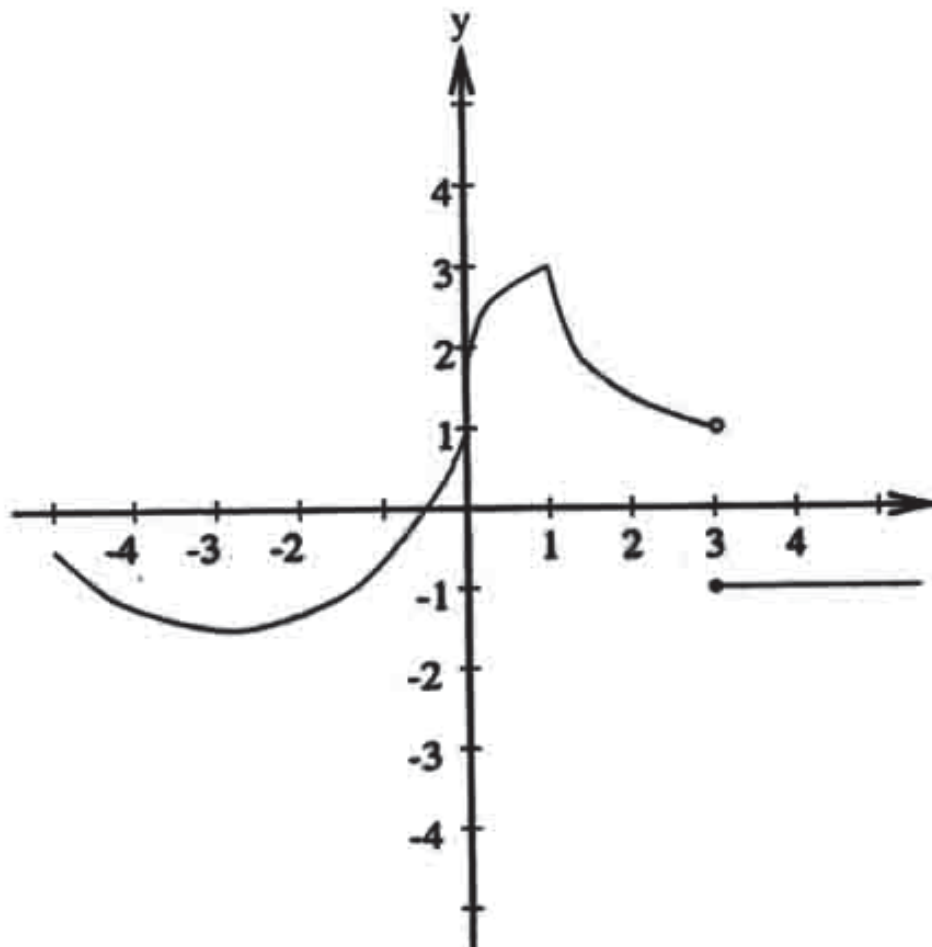


Explain your reasoning clearly.

pts. The graph of the function  $f$  for  $x$  is shown in the figure below.



At which point(s) if any does  $f$  fail to be continuous? Explain why.

At  $x = 3$  the function is discontinuous as there is a break in the graph (or jump)

(b) At which point(s) if any, does  $f$  fail to be differentiable? Explain why.

The function appears to be non-differentiable at  
 $x = 0$  — vertical tangent  
 $x = 1$  — sharp corner  
and  $x = 3$  — not continuous