

8. [10 points] A function  $h(x)$  satisfies all of the following:

- $h(x)$  is continuous on the interval  $-5 < x < 5$ .
- $h(x)$  is differentiable for all  $x$  in the interval  $-5 < x < 5$  except at  $x = 2$ .
- $h(x)$  is decreasing for  $-5 < x < -2$ .
- $h(x)$  has a critical point at  $x = -4$ .
- $h(x)$  is concave up for  $-3 < x < -1$ .
- $h(x)$  has an inflection point at  $x = 1$ .
- $h(x)$  has a local minimum at  $x = 3$ .
- $h(x)$  is increasing at a constant rate for  $4 < x < 5$ .

On the axes provided below, sketch a possible graph of  $h'(x)$  (the derivative of  $h(x)$ ).  
Make sure that your sketch is large and unambiguous.

Graph of  $y = h'(x)$

