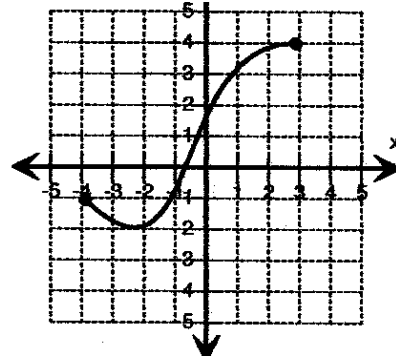
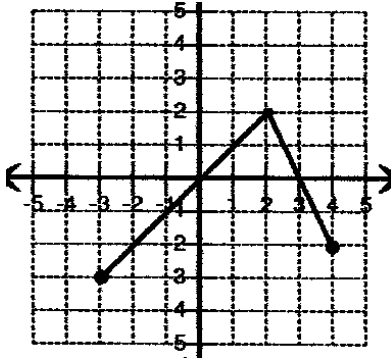
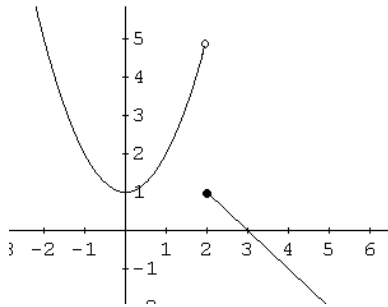
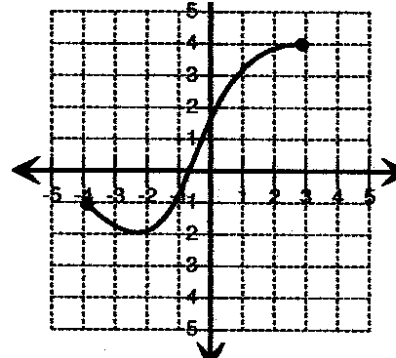
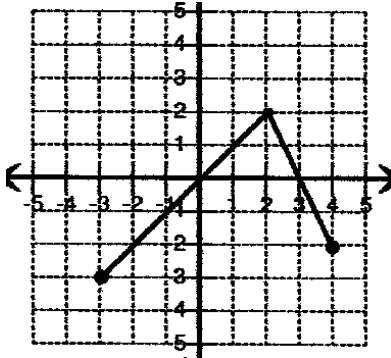


1. Graph the derivative of the functions given below

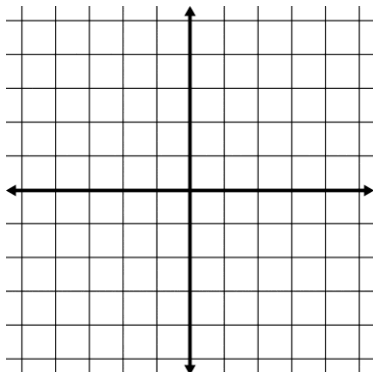


2. Graph the function given the graph of the derivative function



3. Sketch the graph of a continuous function  $f$  with  $f(0) = 1$  and

$$f'(x) = \begin{cases} 3, & x < -1 \\ -1, & x > -1 \end{cases}$$



4. Consider the curve defined parametrically by  $x = 3t^2 - 2t$  and  $y = 2t^3$ . Find the equation for the line tangent to the curve at time  $t = 1$ .
5. A curve C is defined by the parametric equations  $x = 3t^2 - 2t$  and  $y = 2t^3$ . Find the equation of the line tangent to the graph of C at the point (8, 16)?
6. A curve C is defined by the parametric equations  $x = 3t^2 - 2t$  and  $y = 2t^3$ . Determine the times that the curve has a horizontal tangent and a vertical tangent.