

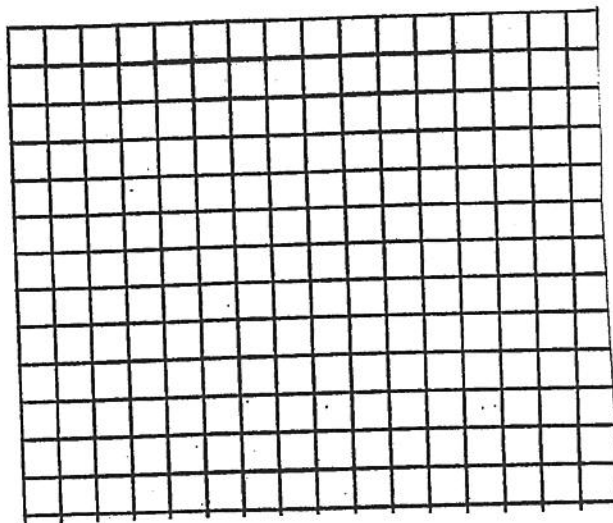
Name: _____
Calculus AB: Graphs of Derivatives

Make a sketch of $f(x)$ and $f'(x)$ on the axes provided.

$$f(x) = 2x - 5$$

1.

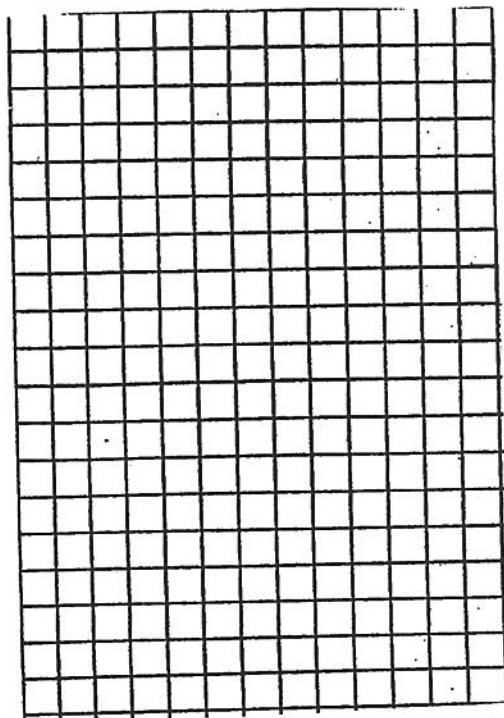
$$f'(x) =$$



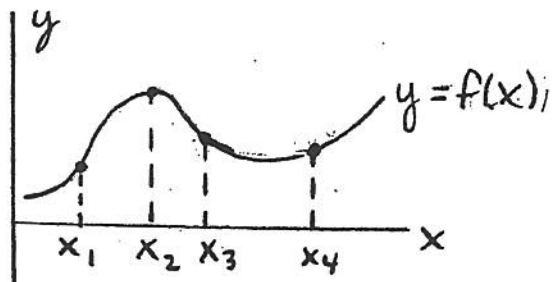
$$f(x) = x^2 - 4x$$

2.

$$f'(x) =$$



Visual Estimates of Derivatives

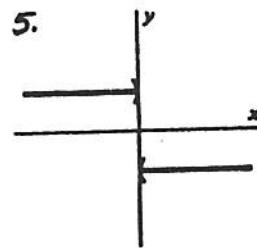
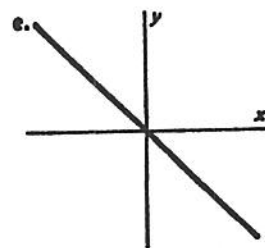
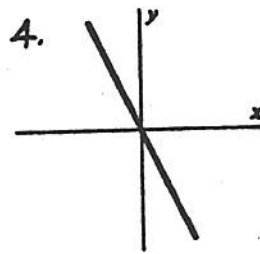
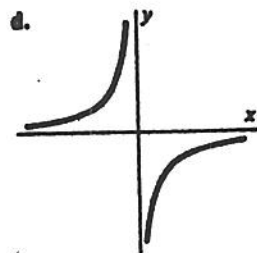
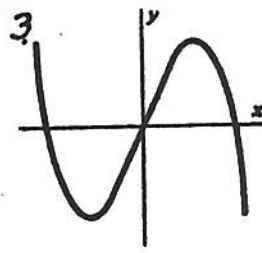
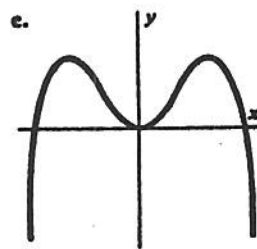
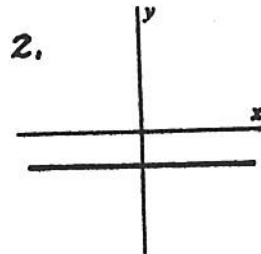
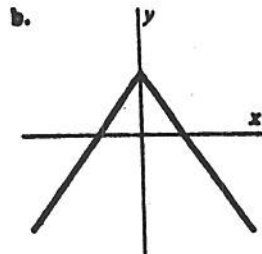
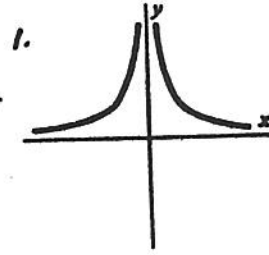
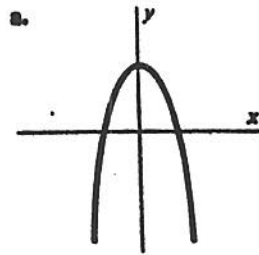


Using the graph of $y = f(x)$, fill in $=$, $>$, or $<$:

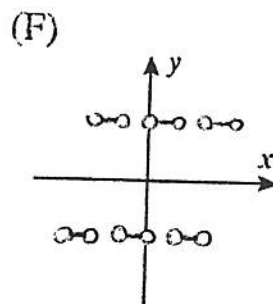
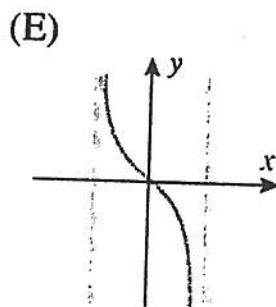
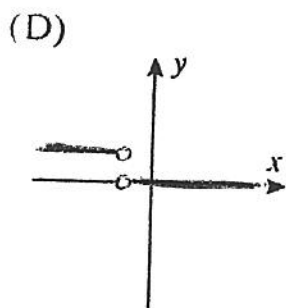
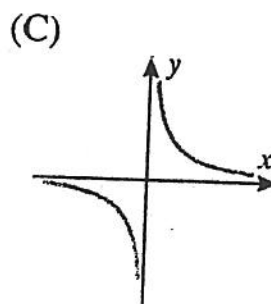
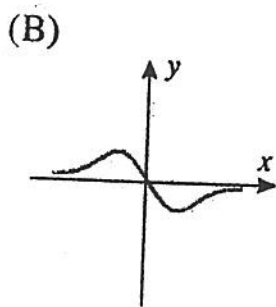
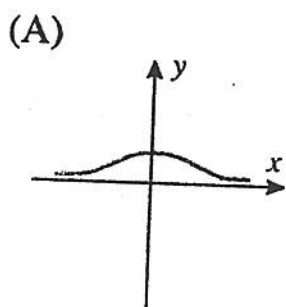
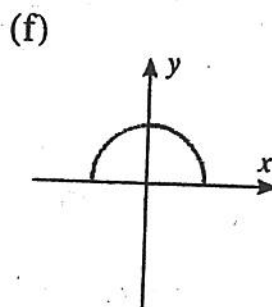
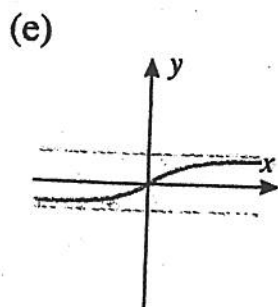
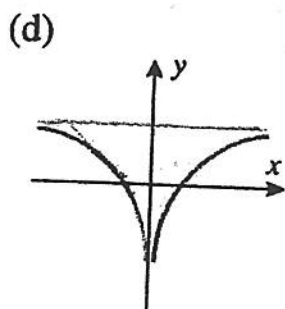
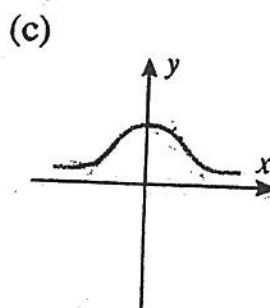
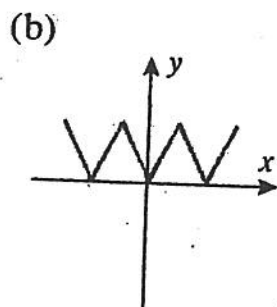
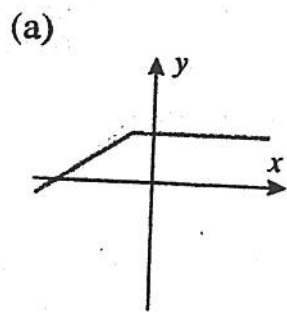
- $f'(x_2)$ 0
- $f'(x_4)$ 0
- $f'(x_3)$ 0
- $f'(x_1)$ 0
- $f'(x_1)$ $f'(x_4)$
- $f'(x_3)$ $f(x_3)$
- $f'(x_2)$ $f'(x_1)$
- $f'(x_2)$ $f'(x_3)$
- $f'(x_3)$ $f'(x_4)$

MATCHING QUESTIONS ON GRAPHS OF DERIVATIVES

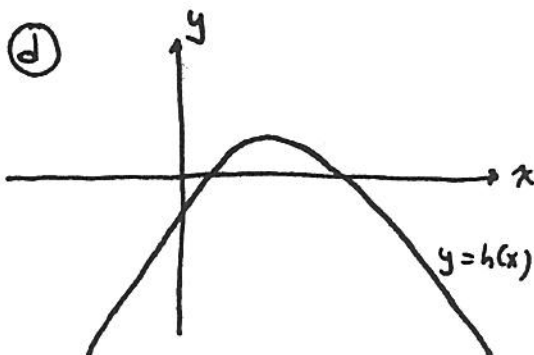
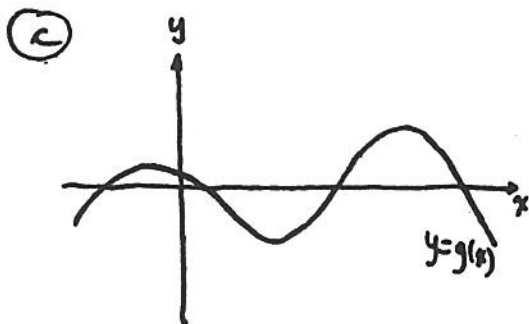
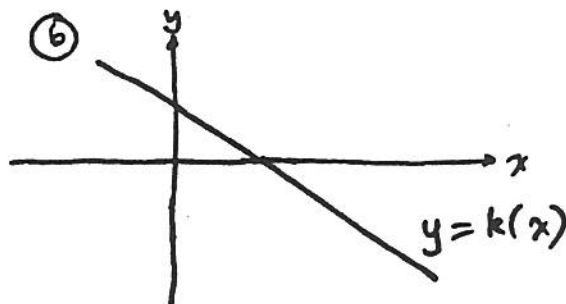
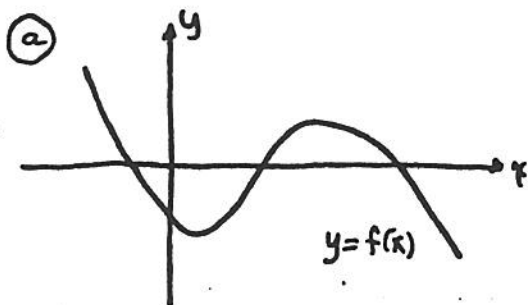
Each of the Figures (1)-(5) is the graph of the derivative of one of the functions graphed in Figures (a)-(e). Match each function with its derivative.



Match the graphs of the functions shown in (a)–(f) with the graphs of their derivatives in (A)–(F).



GRAPHING THE DERIVATIVE



- ① Let the graph in ④ be that of $y = h(x)$. Which of the others is the graph of $y = h'(x)$?
- ② Which is the graph of $y = f'(x)$?
- ③ Which is the graph of $y = g'(x)$?
- ④ Which is the graph of $y = g''(x)$?
- ⑤ Which is the graph of $y = g'''(x)$?