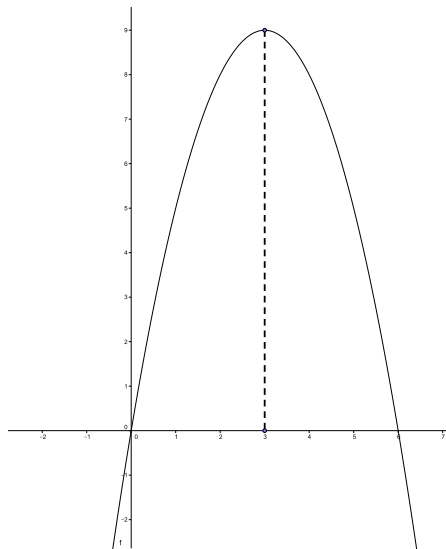


1. (7pts) The graph below is the graph of the DERIVATIVE  $f'(x)$  of a function  $y = f(x)$



[NOTE: The graph above is of the derivative  $f'$  of  $f$ . The questions below refer to  $f$ , not to  $f'$ .]

- a) Determine the intervals where  $f$  is increasing and where  $f$  is decreasing.

- b) Determine the intervals where  $f$  is concave up and where  $f$  is concave down.

- c) Find the  $x$  values of all local maxima and minima of  $f$  (State whether each is a local maximum or local minimum.).

- d) Find the  $x$  values of all inflection points of  $f$ .

2. (3pts) List all the asymptotes of  $f(x) = \frac{2x(x+1)}{5(x-1)(x+2)}$