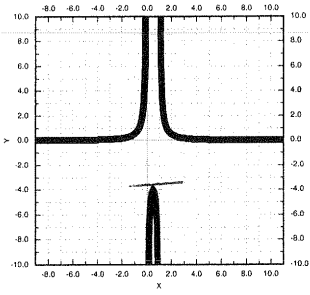


STUDENT NAME:

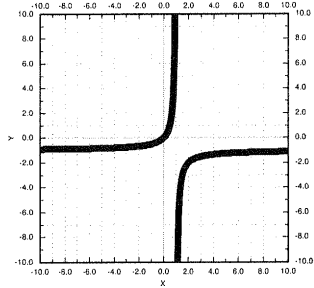
Calculus 1550, section 6. Thursday, February 19, 2004. Eighth quiz.

In the box next to each graph on the left, right the letter of the graph of its derivative. [2 points each].



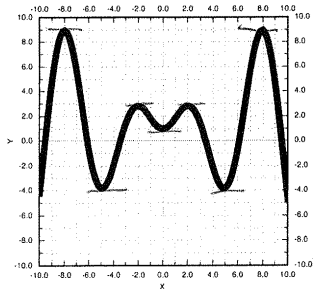
B

this has 2 asymptotes
so does B
also has one place where
slope is zero, & gets close to
zero as |x| gets large.



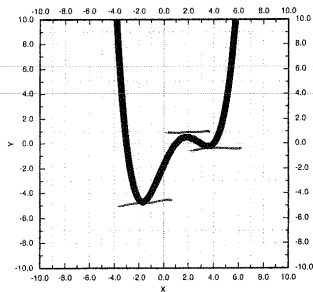
C

this graph has 1 asymptote
so does C.
also note, slope is never -ve



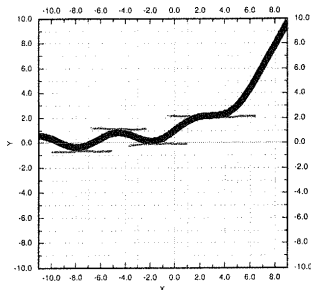
A

the derivative is zero in
7 places, like A



E

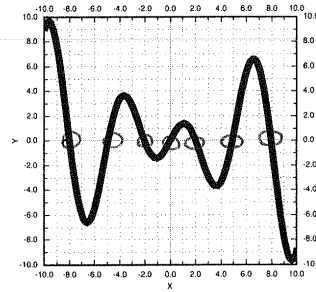
derivative zero in 3 places,
like E



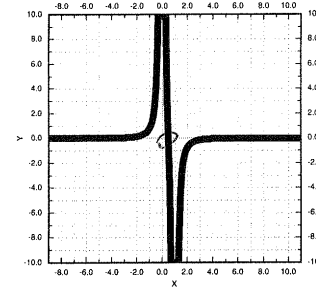
D

derivative zero in 4 places,
like graph of D.

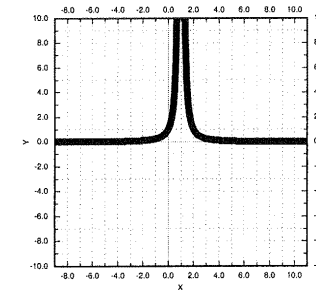
A



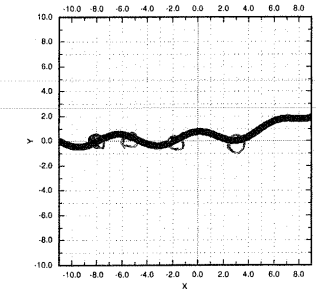
B



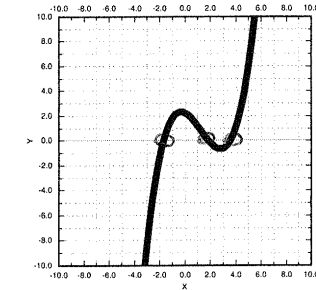
C



D



E



its not necessary
for this quiz,
but in case
you're interested,
these graphs
are, in order of
top to bottom on
left =

$$\frac{1}{x(x-1)}$$

$$\frac{x}{1-x}$$

$$x \sin(x)$$

$$\frac{(x+3)(x-1)(x-3)(x-4)}{20}$$

$$e^{x/4} + \frac{\sin(x)}{2}$$

their derivatives are:

$$\frac{1-2x}{x^2(x-1)^2}$$

$$\frac{1}{(x-1)^2}$$

$$\sin(x) + x \cos(x)$$

$$4x^3 - 15x^2 - 10x + 45$$

$$\frac{1}{4} e^{x/4} + \frac{\cos(x)}{2}$$