MATHEMATICS

Monday November 16 2015

Weekly test VII

Ex.1 Given the following functions:

$$y = f(x) = \frac{x^2}{(x^2 - 4)}$$

    a. Find the domain, the axis intercepts and study the sign of f

    b. Find, if they exist, horizontal and vertical asymptotes

    c. Calculate $f'(x)$. Determine the intervals in which the function increases or decreases. Find (if they exist) local maxima and minima.

    d. Draw the graph of the function