

**MATHEMATICS**  
**Monday November 9 2015**  
**Weekly test VI**

**Ex.1** Study continuity of the following function and determine its vertical and horizontal asymptotes

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

**Ex.2** Determine if the following function is continuous

$$y = f(x) = \begin{cases} \frac{x-4}{\sqrt{x-2}} & \text{if } 0 \leq x < 4 \\ 4e^{x-4} & \text{if } x \geq 4 \end{cases}$$