## Business PreCalculus MATH 1643 Section 004, Spring 2014 Homework 25

1- Find the domain of  $f(x) = \log_2(\sqrt{x-2})$ .

**2-** Given the function  $f(x) = -\ln(x-1) + 1$ :

**a.** Find the domain and the range of f(x).

**b.** Find the vertical asymptote of f(x).

**3-** Solve the equation  $e^{\ln(x^2-2x)} = 8$ .

**4-** Write the logarithmic equation  $\log 1000 = 3$  in exponential form.