

**Business PreCalculus**    MATH 1643 Section 004, Spring 2014  
**Homework 13: Due 2/24/2014**

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**1-** Find the domain of each function:

**a.**  $f(x) = x^3 - 2x + 1$ .

**b.**  $f(x) = \sqrt{5 - x}$ .

**c.**  $f(x) = \frac{x-1}{x^2-9}$ .

**2-** Let  $f(x) = -\frac{1}{4}x - 15$ , then evaluate  $\frac{f(-12)-f(20)}{4}$ .

**3-** Given the equation  $y = x^2$ .

**a.** Draw the graph of the equation.

**b.** Apply the vertical line test to part (a) to decide whether the graph is a graph of a function or not.

**4-** Find the  $x$ -intercepts of the function:

**a.**  $y = x^2 + 16x + 64$ .