

**Business PreCalculus**    MATH 1643 Section 004, Spring 2014  
**Homework 17**

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**1-** Let  $f(x) = \frac{1}{x^2-6x+8}$  and  $g(x) = 3 - x$ , then find:

**a.**  $(f \cdot g)(2)$ .

**b.**  $(\frac{f}{g})(1)$ .

**2-** Let  $f(x) = x^2 + 3x$  and  $g(x) = 2x$ , then:

**a.** Find  $f \circ g(x)$ .

**b.** Find the domain of  $f \circ g(x)$ .

**3-** If  $H(x) = f \circ g(x)$  and  $H(x) = \frac{1}{7-2x} + (4x^2 + 10x + 6)^{11}$  and  $g(x) = 2x$ , then find  $f(x)$ .