

**MATHEMATICS 1**  
**Monday October 3 2016**  
**Weekly test II**

**Ex.1** Write the equation of the line that passes through the point  $A(3;2)$  and perpendicular to the line that passes through  $P(1;4)$  and  $Q(-2;5)$ .

**Ex.2** Given the functions  $f(x) = \frac{x}{1+x^2}$  and  $g(x) = x - 1$  find  $f \circ g(x)$  and  $g \circ f(x)$ .