## $\mathrm{MA}\ 158$

7 septiembre 2016

**Instructions:** Show all work, with clear logical steps. No work or hard-to-follow work will lose points.

Problem 1. (2 points) Given

$$f(x) = \frac{7x+1}{9-x}, \quad g(x) = \frac{1}{x},$$

find  $(f \circ g)(x)$ .

**Problem 2.** (2 points) Find  $(g \circ f)(x)$  with the same f and g.

**Problem 3.** (Bonus 1 point) Find the domain of  $f \circ g$  and  $g \circ f$ .

Quiz2