## DC FELLOWS PROGRAM MATH IMMERSION SUMMER COURSE

## $\begin{array}{c} \text{PROOF PRACTICE} \\ \text{JUNE 9, 2008} \end{array}$

- (1) If  $r_1$  and  $r_2$  are roots of the polynomial  $f(x) = x^2 + bx + c$ , then  $r_1 + r_2 = -b$  and  $r_1 r_2 = c$ .
- (2) If f(x) and g(x) are functions having all real numbers as their domains, then the domain of their composition f(g(x)) is all real numbers.