

Math 1a
Fall 2009

HOMEWORK SET 1
DUE AT 10AM ON MONDAY, OCTOBER 5, 2009

Note: Each problem is worth 20 points.

- (1) Prove (using only the field axioms) that $(-1) \cdot (-1) = 1$.
- (2) Prove that $\sqrt{3} - \sqrt{5}$ is irrational.
- (3) Page 35, problem 1c
- (4) Page 45, problem 8
- (5) Page 46, problem 14