**Lecture 2**

**Review HW**

**Absolute value**

* |x - a| = distance from x to a.
* |x + a| = distance from x to (- a). *Proof.* x + a = x - (- a)
* |mx + b| = distance from mx to (- b)

HW: Page 10: 15, 18, 21, 23, 24

**Comment on absolute value function.**

**Real numbers**

* Show that there is a rational between any two real numbers.
* Show that there is an irrational between any two real numbers.

**More real numbers than rationals?**