Jean S. Joseph\* (jjose107@fau.edu). The Real Numbers as Completions of Linearly Ordered Sets: A Constructive Study.

We will present two notions of completion of a linearly ordered set. These two completions are generalizations of the canonical constructions of the real numbers as a set of Dedekind cuts of rational numbers and as equivalence classes of Cauchy sequences of rational numbers. Also we will discuss to what extent these completions are order isomorphic. (Received September 23, 2018)