Letwity 12.9 ON THE LINE

Have two students stand and form the end points of a number line using a piece of rope. One stands at zero and the other student to the right at one whole (about 10 feet apart). Each student holding the rope will have a clothespin attached to the rope with a card marked 0 or 1 for the class to use as a guide. Give out a variety of fractions on cards with clothespins—one to each team of two students. Then ask for a volunteer team to place their fraction on the number line. The likely respondents to start may have a card with $\frac{1}{2}$ or $\frac{1}{4}$. Place those and then call on others to come up and locate their fraction on the number line. This activity can be played repeatedly with cards that include equivalent fractions (placed at the exact same point), cards with fractions greater than one (use larger pieces of rope and more holding points), and eventually decimals. Make sure students talk to each other as they agree or disagree on a location or as they think aloud about their decision making. Ask students who are watching a placement why an estimate of a location is a good one. At first, you may want to give students with disabilities unit fractions. That will help them estimate the distances (even by folding the rope if needed).

From Van de Walle et. al. (2014). Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 3-5 (2^{nd} Ed.). Toronto: Pearson Education, Inc. (p. 218-219).