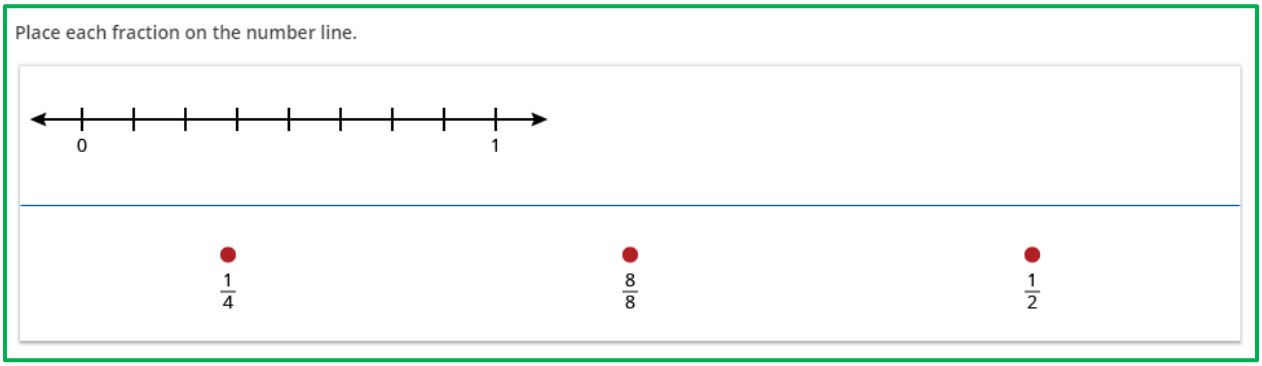
# NWEA Assessment Item Illustrating 3.NF.A.3.b



**Domain:** Number and Operations–Fractions
**3.NF.A:** Develop understanding of fractions as numbers.
**Calculator Availability:** No



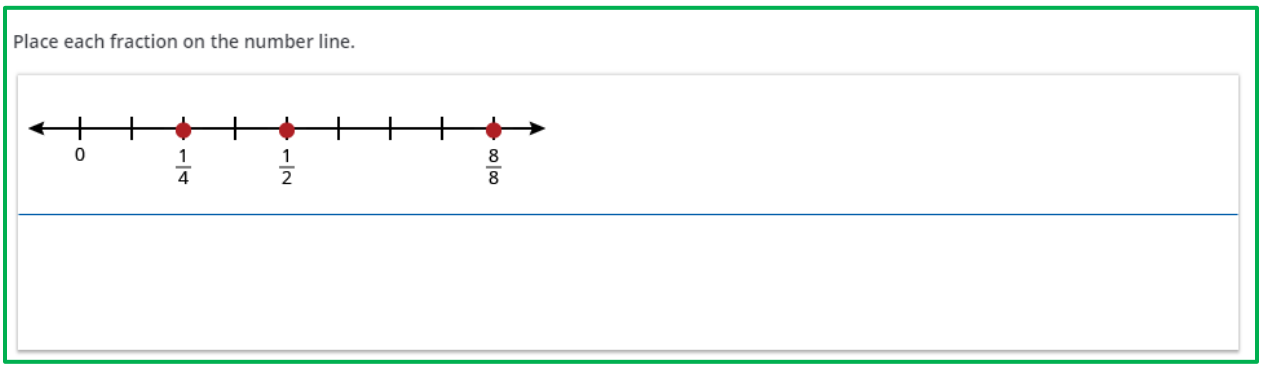

**Alignment: 3.NF.A.3b:** Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Using a number line to compare fractions and reason about fraction equivalence provides students with the opportunity to deepen their understanding of fractional quantities and the relationship between the size of the fraction and its denominator. Although students might have learned that the larger the denominator means the smaller the fraction, the item still requires students to reason about and compare the fraction sizes because 8/8 is the largest fraction.

**Coherence:** Fraction equivalence is a crucial area of understanding because students will need to use it to do fraction computation[4.NF.B.3, 4.NF.C.5, 5.NF.B.5] in grades 4 and 5. In grade 6, students will use their understanding of fraction equivalence when working with ratios[6.RP.A.1] and one-variable equations.[6.EE.B.7]

**Rigor:** This item attends to conceptual understanding. Students integrate grade-level concepts in order to complete the item: using a number line to compare the sizes of three fractions, and understanding the relationship between fourths, halves, and eighths in order to correctly place the fractions on the number line, which is divided into eighths.

**Answer Key:**



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