

Grade 4 Smarter Balanced Assessment Item Specifications Fact Sheet

Claim 1 - Target H: Understand decimal notation for fractions, and compare decimal fractions.

Content Domain: Numbers and Operations - Fractions

Claim 1 Priority Cluster

Standards Assessed in Target H:

4.NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.*

4.NF.6: Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.*

4.NF.7: Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Achievement Level Descriptors

Level 1	No Descriptor.
Level 2	Students should be able to express a fraction with denominator 10 as an equivalent fraction with denominator 100 and express those fractions as decimals.
Level 3	Students should be able to add two fractions with respective denominators 10 and 100 by first converting to two fractions with like denominators; compare two decimals to the hundredths using $>$, $<$, $=$, or on a number line; and compare decimals by reasoning about their size.
Level 4	Students should be able to compare two decimals to the hundredths using $<$, $>$, and $=$ and justify the conclusions by using visual models.

Construct-Relevant Vocabulary

centimeters, decimal, denominator, equal, equation, equivalent, expression, fraction, grams, kilograms, kilometers, length, liters, mass, meters, milliliters, number line, volume

Allowable Stimulus Materials

$<$, $>$, and $=$ symbols, fractions, decimals to the hundredths, decimal models, number lines, fraction addition problems