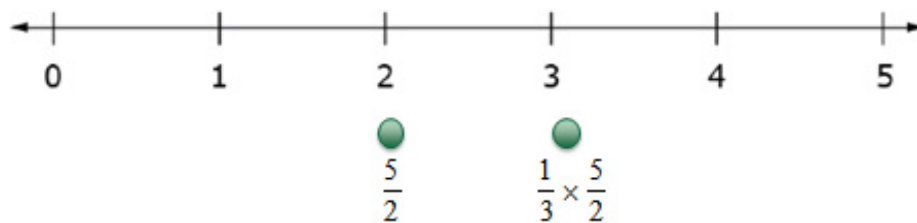


Smarter Balanced Assessment Item Illustrating 5.NF.B.4

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Use the “Add tick marks” button to partition the number line. Drag each point to a tick mark that shows its correct location on the number line.



Answer Key

Student adds tick marks to partition the number line and drags each expression to the correct location.

Elaboration on Alignment

The number line in this problem serves an important role in illustrating the coherence of the standards. It provides an opportunity for students to use the number line as a tool to perform the indicated multiplication (if they choose to), but at a higher level allows students to have a general sense of what it means to “multiply by $\frac{1}{3}$.” The number line allows students to assess the reasonableness of their answer by asking, “Does the position of my point for $\frac{1}{3} \times \frac{5}{2}$ look about $\frac{1}{3}$ of the way from 0 to $\frac{5}{2}$?”

For assessment delivery systems that do not include an “Add tick marks” feature, a problem like this can still capture students’ understanding of the relationship between the number $\frac{5}{2}$ and the expression $\frac{1}{3} \times \frac{5}{2}$.

Learn More

Learn more about high-quality assessment items by visiting the [MATH Assessment Item Alignment Modules](#) at www.achievethecore.org.