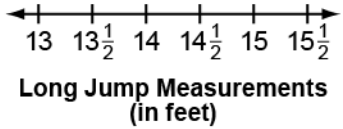
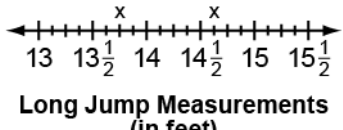


Content Standard		MAFS.4.MD Measurement and Data MAFS.4.MD.2 <i>Represent and interpret data.</i> MAFS.4.MD.2.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i>
Assessment Limits		Measurement units are limited to halves, quarters, and eighths. Addition and subtraction of fractions is limited to fractions with the same denominators. Multiplication and division is limited to 2-digit by 1-digit, or 2-digit by 2-digit, where one number is a multiple of 10. Addition and subtraction within 1,000.
Calculator		No
Acceptable Response Mechanisms		Equation Response Graphic Response – Hot Spot
Context	Allowed	
Example		
Context	For construction, data is in eighths, with wholes, halves, and quarters optional. For problem solving, data is in quarters, with wholes and halves optional.	
Context easier	For construction, data is in quarters, with wholes and halves optional. For problem solving, data is in halves, with wholes optional. Decrease the amount of data.	
Context more difficult	For problem solving, data is in eighths, with wholes, halves, and quarters optional. Increase the amount of data.	

Sample Item Stem	Response Mechanism	Notes, Comments
Long jump measurements are given. Long Jump Measurements (in feet) $4\frac{1}{4}$ $4\frac{1}{2}$ 4 $4\frac{1}{4}$ $3\frac{3}{4}$ $3\frac{3}{4}$ Click above the number line to create a correct line plot of the data.		

Benny recorded the results for his top four long jump attempts. The total was 57 feet. Click above the number line to create a possible line plot for these data. 	Graphic Response – Hot Spot	
Benny recorded the results for his top four long jump attempts. The total was 57 feet. The first two jumps are shown on the number line. Click above the number line to show the possible lengths of Benny’s last two jumps. 	Graphic Response – Hot Spot	