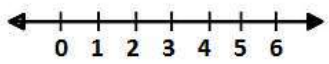
Content Standard	***MAFS.8.NS*** *The Number Systems* ***MAFS.8.NS.1*** *Know that there are numbers that are not rational, and approximate them by rational numbers.* ***MAFS.8.NS.1.2*** Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). *For example, by truncating the decimal expansion of* $\sqrt{2}$*, show that* $\sqrt{2}$ *is between* 1 *and* 2*, then between* 1.4 *and* 1.5*, and explain how to continue on to get better approximations*.
Assessment Limits	All irrational numbers may be used, excluding *e*. Irrational expressions should only use one operation.
Calculator	No
Item Types	Equation Editor GRID Multiple Choice Multiselect Open Response
Context	No context

Sample Item	Item Type
What is the approximate value of $\sqrt{3}$, to the nearest whole number?	Equation Editor
What is the approximate value of $\sqrt{12}$? A. 2 B. 3.5 C. 4.5 D. 6	Multiple Choice
A number line is shown. Place the following numbers in the proper location on the number line.  • $\sqrt{3}$ • $\sqrt{8}$ • $\sqrt{23}$	GRID

See Appendix for the practice test item aligned to this standard.