

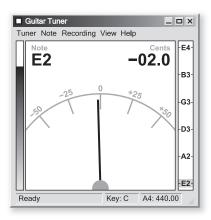
## Performance Task (continued)

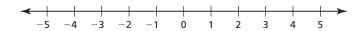
## **Tuning Guitars**

How do you know if a guitar has been tuned accurately?

The units on a guitar tuner are measured in cents. The units tell you how far the string tone is above or below the correct pitch. If the tone is above the target note, then the reading is positive. If the tone is below the target note, then the reading is negative. The closer the reading is to 0, the more accurate the tuning is.

**1.** The reading for one note of a guitar is shown. Graph the number on the number line. If another guitar is tuned to the same accuracy, but higher than the target note, what will the display read? Graph that number on the number line.





- **2.** The tuning of another guitar is less accurate than the guitars in Exercise 1. Give an example of a possible reading on the tuner for this guitar. Explain your reasoning.
- **3.** The tuning of another guitar is more accurate than the guitars in Exercise 1. Give an example of a possible reading on the tuner for this guitar. Explain your reasoning.

## Performance Task (continued)

## **Tuning Guitars**

**4.** Order the values from the three tuner readings from least to greatest.







Guitar 1

Guitar 2

Guitar 3

**5.** Order the guitars from Exercise 4 from least accurate to most accurate.

**6.** In Exercise 4, which two guitars would sound the best together if they played the note at the same time? Which two guitars would sound the worst together? Explain your reasoning.