9A

Comparing Fractions and Decimals

GOAL Use a variety of tools to compare and order fractions and decimals.

You will need

- fraction strips
- a calculator

Explore the Math

Some friends are memorizing new songs on a CD.

Bonnie said, "I memorized 2 songs and $\frac{3}{4}$ of another song."

Miguel said, "I memorized 2 songs and $\frac{4}{5}$ of another song."

Kwami said, "I memorized 2.90 songs."

Ravi said, "I memorized 2.85 songs."

James said, "I memorized $\frac{27}{10}$ songs."

? Who memorized the most songs?

- **A.** Use fraction strips to represent the amount Bonnie memorized.
- **B.** Use your fraction strips from step A to draw a number line and mark the amount Bonnie memorized.



- **C.** Use fraction strips to represent the amount Miguel memorized. Use your fraction strips to mark this amount on your number line from step B.
- **D.** Use fraction strips to represent the amount Kwami memorized. Why can you use tenth fraction strips? Use your fraction strips to mark the amount Kwami memorized on your number line.
- **E.** Mark the amount Ravi memorized on your number line. Explain your strategy.
- **F.** Repeat step E for James.
- **G.** List the students in order from who memorized the most songs.
- **H.** Who memorized the most songs?

Reflecting

- **1.** Tell how to use a calculator to check the order of the fractions and decimals.
- **2.** Jody memorized three songs and part of another. How do you know whether this is more or fewer songs than the other students?