

## Using Technology

Technology can be very helpful, and important, when computing with decimals and fractions. Especially with the decrease in cost and the increase in the types of calculators available, the following ideas should be incorporated throughout this instruction.

- Use a physical calculator, an app, or an online calculator that has a tape readout. Students with motor or memory difficulties will be helped by referring to the printed/visual tape to check what has been keyed;
- Provide headphones and a calculator model with a speech component for students who need or benefit from auditory input; and
- Use a larger desk-size calculator/calculator app for students with motor or visual-perception deficits so that they can more easily see the keys and read the visual display.

There are commercially available calculators that allow fractions to be keyed in, processed, and displayed. If possible, use calculators that show the fraction in vertical form rather than horizontal. Knowing students' learning styles and strengths, teachers will need to work with students to determine how calculators are best used for fraction computation. Regarding calculators' use for decimals, students who otherwise can use calculators tend to have difficulty primarily with decimal calculations involving terminal zeros. See Activity 6 in the Section "Comparing decimals," and Figure 8.14.

Too often educators think of spreadsheets as a separate course or part of instruction unto itself. Simple use of spreadsheets can help even young students see the relationship between fractions and decimals and how they are intertwined in daily life. Figure 8.57 shows some examples, related to Activity 1 ("Fraction clock") in the "Dividing Fractions" section, which can help give meaning to these rational numbers.

**Figure 8.57.** Simple use of spreadsheets to reinforce and relate rational numbers to daily life.

