

Activity 2

Factors Galore A: Common Factors

Students will use the calculator to simplify fractions and investigate common factors and the greatest common factor of the numerator and denominator.

Concept

- ◆ Number sense/numeration

Skill

- ◆ Finding common factors, greatest common factor
- ◆ Simplifying fractions
- ◆ Prime factorization
- ◆ Calculator skills: Mode, $\frac{\square}{\square}$, \square SIMP

Materials

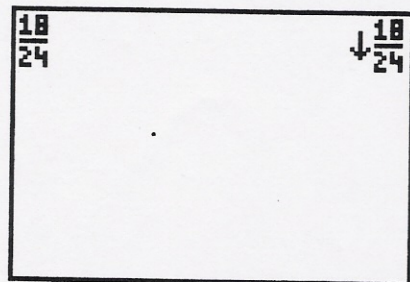
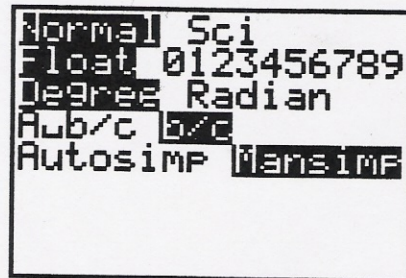
- ◆ Student Activity sheets (page 8)
- ◆ TI-73 calculators

Activity

Before doing this activity, students should have some experience with simplifying fractions, prime numbers, and prime factors.

Note: Make sure the calculator is set to **Mansimp** to manually simplify fractions and to **b/c** to input fractions. To do this:

1. Press \square MODE \square , use the arrows to move down and over to $\frac{\square}{\square}$, and press \square ENTER \square .
2. Move to **Mansimp** and press \square ENTER \square .
3. Press \square 2nd \square [QUIT] to return to the Home screen.
4. Have the students enter each fraction from the Student Activity sheet into the Home screen of the calculator by typing the numerator, pressing $\frac{\square}{\square}$, typing the denominator, and pressing \square ENTER \square . The arrow next to the fraction shows that the fraction can be simplified. Discuss with students how they know that the fraction



is unsimplified. For example, in $\frac{18}{24}$, the numerator and denominator are both even, so we know that 2 is a common factor. Before continuing with the activity, you may want to show examples of other unsimplified fractions on the board and discuss with students how they can be simplified.