

Wrap-Up

Discuss the process the calculator is using to simplify fractions.

There is a possibility that students will misunderstand the mathematics of division by 1 since the calculator only shows the prime factor and not that the calculator is dividing both numerator and denominator by this prime factor. Students may not understand that they are dividing by 1 in the form of $\frac{\text{GCF}}{\text{GCF}}$.

Have the students work the problem backwards by taking the simplified fraction and multiplying it by 1 in the form of $\frac{\text{GCF}}{\text{GCF}}$ to verify that the simplified fraction is equivalent to the original fraction.

Students need to show the mathematics, not just the calculator screen. Encourage them to show that they understand the step-by-step process of how simplification works.

Assessment

Ask students to explain in writing the process that is being used to simplify fractions. Can this be done another way? (Finding the GCF in one step.) Explain.

Extension

- ◆ Investigate exponents found in the completed table. For example, in the fraction $\frac{128}{640}$, the prime factorization is $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$ or 2^7 .