

Number and Operations

Goal: The learner will understand and compute with rational numbers

Objective:

1.06 Use exponential, scientific, and calculator notation to write very large and very small numbers.

To achieve this objective, students should:

- Relate negative powers of 10 as used in scientific notation to repeated multiplication of the fraction $\frac{1}{10}$
(e.g. $10^{-3} = \frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10} = \frac{1}{1000}$)
- Relate positive powers of 10 as used in scientific notation to repeated multiplication of ten (e.g. $10^3 = 10 \cdot 10 \cdot 10 = 1000$)
- Convert numbers written in scientific notation to standard notation and numbers written in standard notation to scientific notation
- Use calculators to explore contexts in which numbers are expressed in scientific notation.