Enduring Understandings

Operations with real numbers can be used to solve problems.

Proportional situations involve multiplicative relationships.

Essential Questions

How do operations with rational numbers compare to operations with integers?

Why do we use roots and powers?

What kinds of questions can be answered using proportional reasoning?

Indicators

6.IM.6.3 analyze the set of integers and rational numbers for group properties with respect to addition and multiplication.
6.IM.7.3 select and apply mathematical properties to solve problems with real numbers. (6.8.7.3)
6.IM.5.1 add, subtract, multiply, and divide with rational numbers. (6.8.5.1)
6.IM.5.4 model and apply the rules of exponents. (6.8.5.4)
6.IM.5.5 multiply and divide by powers of ten. (6.8.5.5)
6.IM.5.2 describe the relationship between roots and powers. (6.8.5.2)
6.IM.5.3 calculate powers and square roots of numbers. (6.8.5.3)
6.IM.7.1 estimate powers and square roots to solve problems. (6.8.7.1)
6.IM.7.2 apply the concepts of ratios, rates, unit rates, and percents to real-world problems, including rate of increase/decrease, discount, commission, sales tax, and simple interest. (6.8.7.2)