Math 7: Integers

Unit Overview

In this unit, students extend addition, subtraction, multiplication, and division to integers, maintain the properties of operations, and the relationships between addition and subtraction, and multiplication and division. Applying the properties, and viewing negative numbers in terms of everyday contexts , students explain and interpret the rules for adding, subtracting, multiplying and dividing negative numbers. They use the arithmetic of integers as they formulate and solve expressions and linear equations in one variable.

7.NS.A.1		Apply and extend understanding of addition and subtraction to addition and subtraction of integers; graph integers on a number line.
7.NS.A.1a		Describe situations that combine to make 0.
7.NS.A.1b		Absolute value; additive inverses.
7.NS.A.1c		Understand $p-q=p+(-q)$.
7.NS.A.1d		Apply properties of operations to add or subtract.
7.NS.A.2		Apply and extend understanding of multiplication and division to multiplication and division of integers.
7.NS.A.2a		Apply properties of operations, particularly the distributive property leading to products such as $(-1)(-1)=1$.
7.NS.A.2b		Understand that division by zero is undefined. Know if p and q are integers then $-(p/q) = (-p)/q = p/(-q)$.
7.NS.A.2c		Apply properties of operations to multipy or divide.
7.NS.A.3		Solve real-world and mathematical problems.
7.EE.B.3		Solve multi-step real-life and mathematical problems involving integers. Use estimation strategies .
7.EE.B.4		Variables; simple equations and inequalities
7.EE.B.4a		Solve equations in the form of $px+q=r$ *and* $p(x+q)=r$.