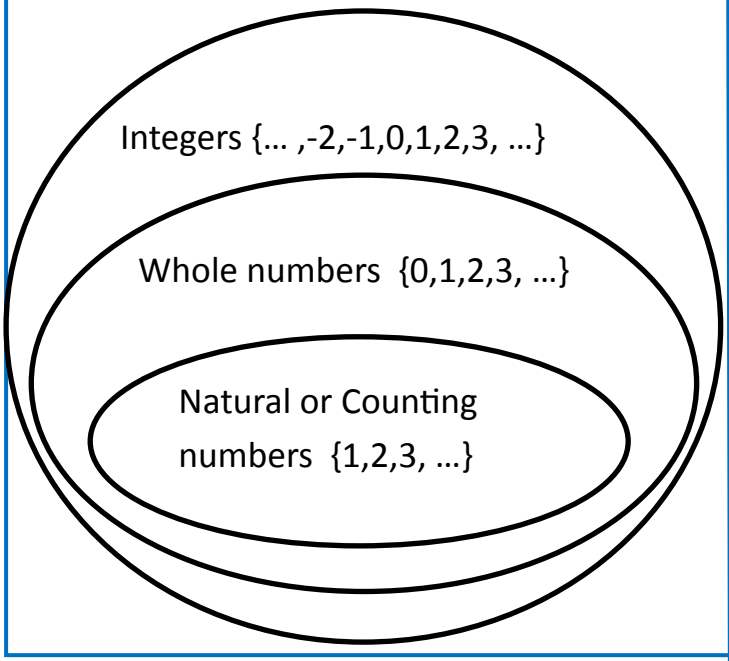
A FOUNDATIONS

Number Sense	Definition	Example
Absolute Value	The distance between a number and zero.	$\|5\| = 5$, $\|-5\| = 5$
Order of Operations	PEMDAS	Parentheses, Exponents, Multiply and Divide, Add and Subtract.
Expressions	*(No equal sign)*	
Arithmetic Expression	A mathematical **statement** with only numbers or operators.	2 + 6
Algebraic Expression	A mathematical **statement** with variables, numbers and operators.	2x + 6
Quadratic Expression	A mathematical **polynomial expression of the second degree** with variables, numbers and operators.	Ax^2+Bx+C
Equations	*(Equal sign)*	
Arithmetic Equation	A mathematical **equation** with only numbers or operators.	2+6=8
Algebraic Equation	A mathematical **equation** with variables, numbers, and operators.	2x+6=10
Quadratic Equation	A mathematical **polynomial equation of the second degree** with variables, numbers, and operators.	$Ax^2+Bx+C=0$
Variable	Alphabetical character representing a number.	X
Coefficient	Number in front of a variable.	**2**x
Term	A term is either a number, a variable, or a number and variable multiplied together. + and - signs separate terms.	2x one term 2x + 3 two terms 2x + 3 - y three terms
Scientific Notation	A method for expressing **very large or small** numbers.	$a \times 10^m$
Standard Notation	It is a number written simply as a **number**.	0.0000067 or 65,839,275
Exponential Notation	A method of representation of numbers in **shorter form**.	a^m
Polynomial	An algebraic expression with one or more terms.	2x monomial 2x +3 binomial $2x^2 + 3x - 2$ trinomial 1 term 2 terms 3 terms
Degree of Polynomial	The largest exponent of a term within a polynomial.	2x 1st degree $2x^2$ 2nd degree $2x^3$ 3rd degree
Leading Coefficient	The coefficient of the first term of a polynomial written in descending order of exponents.	$2x^3+3x^2-x+2$

FOUNDATIONS

Rational ⅘ 0.54 $0.0\overline{23}$



Irrational √3, π, 0.010010001…

Reciprocal of "N"

$\frac{1}{N}$ = N	N^{-1}	$\frac{3}{4} = \frac{4}{3}$

Parts of an Equation by Operator

Addend + Addend = Sum	**Minuend—Subtrahend= Difference**
Factor x Factor = Product	**Dividend / Divisor = Quotient**

Prime and Composite

Prime	Any positive integer with only two factors: 1 and itself.
Composite	A positive integer with more than two factors.

Percent—Fraction—Decimal

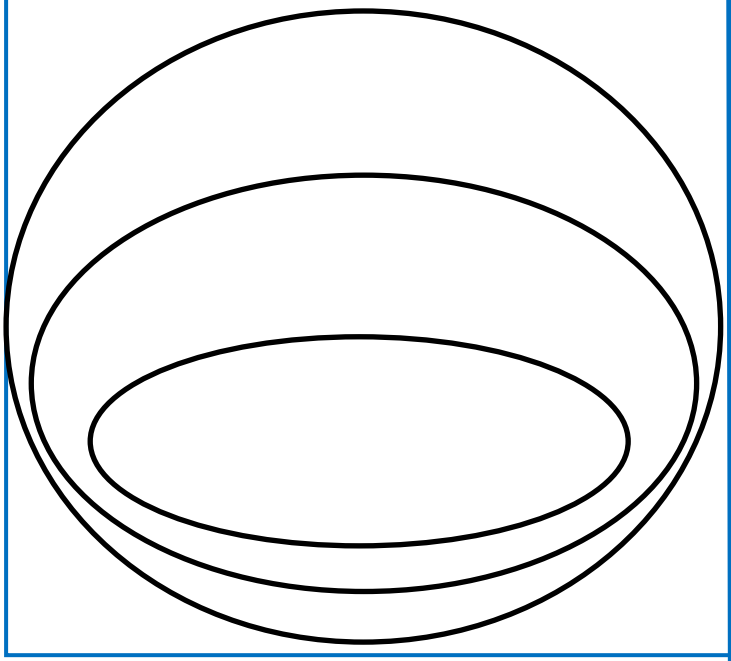
30%	$\frac{3}{10}$	**0.30**

π = 3.14159365359

A FOUNDATIONS

Number Sense	Definition	Example
Absolute Value		
Order of Operations		
Expressions	*(No equal sign)*	
Arithmetic Expression		
Algebraic Expression		
Quadratic Expression		
Equations	*(Equal sign)*	
Arithmetic Equation		
Algebraic Equation		
Quadratic Equation		
Variable		
Coefficient		
Term		
Scientific Notation		
Standard Notation		
Exponential Notation		
Polynomial		
Degree of Polynomial		
Leading Coefficient		

FOUNDATIONS



Reciprocal of “N”

Parts of an Equation by Operator

Prime and Composite

Prime	
Composite	

Percent—Fraction—Decimal

π