



FLAME Grade 8 Parent Glossary

- **cube roots:** The **cube root** of a number is the factor that we multiply by itself three times to get that number. The symbol for cube root is $\sqrt[3]{\quad}$
Example: $3 \times 3 \times 3 = 3^3 = 27$ so $\sqrt[3]{27} = 3$
- **equation:** a statement that the values of two mathematical expressions are equal
Example: $2x + 9 = 24$
- **exponent:** a quantity representing the power to which a given number or expression is to be raised, usually expressed as a raised symbol beside the number or expression (e.g. 3 in $2^3 = 2 \times 2 \times 2$).
- **expression:** An **expression** is any mathematical statement that consists of numbers, variables and an arithmetic operation between them.
Example: $4m + 5$ is an expression where $4m$ and 5 are the terms and m is the variable of the given expression separated by the arithmetic sign $+$.
- **function:** a relationship between inputs where each input is related to exactly one output
- **integer:** a whole number (not a fractional number) that can be positive, negative, or zero.
Examples of integers are: -5 , 1 , 5 , 8 , 97 , and $3,043$.
Examples of numbers that are not integers are: -1.43 , $1 \frac{3}{4}$, 3.14 , $.09$, and $5,643.1$.
- **irrational number:** An **irrational number** is a real number that cannot be written as a fraction (like $\frac{2}{3}$) and when written as a decimal, goes on forever without repeating any pattern; essentially, it's a number that never ends or repeats when written as a decimal.
- **linear:** a function or equation that when graphed, produces a straight line
- **rational number:** A **rational number** is any number that can be written as a fraction where both the top and bottom numbers are whole numbers (integers), meaning it can be expressed as a "ratio" between two integers; essentially, any number that can be neatly written as a fraction is considered rational.
- **variable:** a symbol (usually a letter) that represents an unknown number or quantity in an equation or expression.