

absolute value

The distance a number is from zero on a number line.

Examples: The absolute value of $+13$ is 13.

The absolute value of -107 is 107.

coordinate plane

A plane formed by two perpendicular number lines in which every point is assigned an ordered pair of numbers.

coordinates

An ordered pair of numbers that locates a point in the coordinate plane with reference to the x -axis and y -axis.

equation

A mathematical sentence that shows that two expressions are the same value.

function

A rule that gives exactly one value of y for every value of x .

function table

A table that matches each input with one output value.

integers



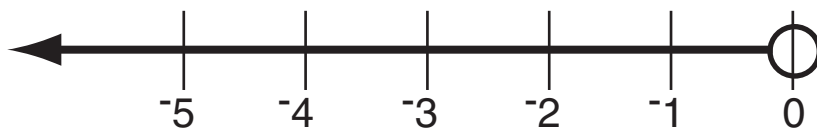
The set of positive whole numbers,
their opposites (negative numbers), and 0.

inverse operations

Operations that have opposite effects.

Examples: Subtraction is the *inverse operation* of addition.
Division is the *inverse operation* of multiplication.

negative numbers



Numbers that are less than 0.

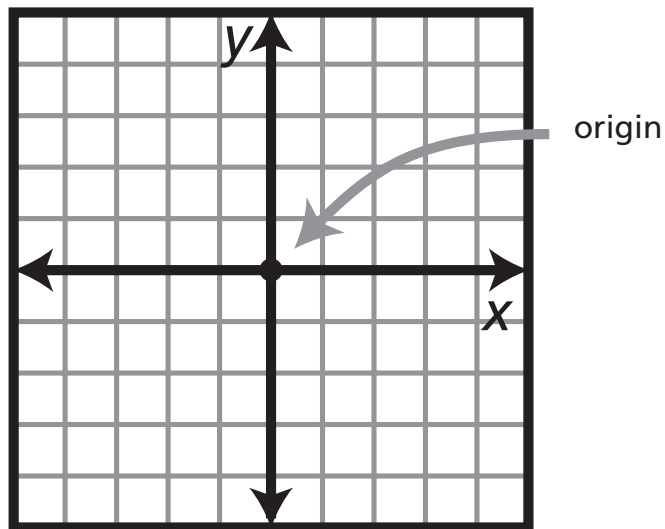
opposite

Numbers with the same absolute value but different signs.
0 is its own opposite. Also called the *additive inverse*.

ordered pair

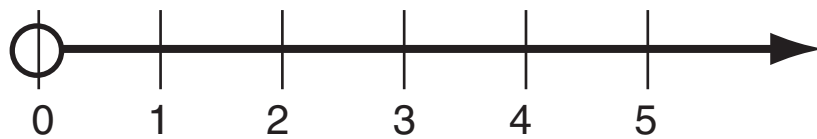
A pair of numbers (x, y) indicating the x -coordinate and y -coordinate of a point on a graph.

origin



The point where the x - and y -axis intersect in a coordinate plane.

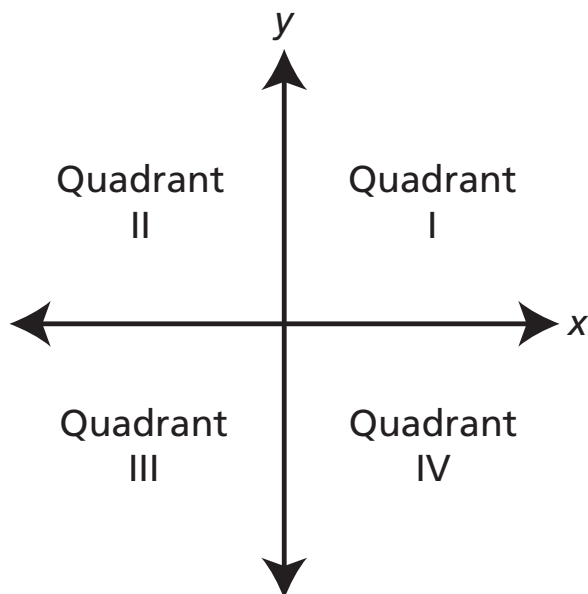
positive numbers



A number that is greater than 0.

quadrant

Each of the four parts into which a plane is separated by the x -axis and the y -axis. The axes are not parts of that quadrant.

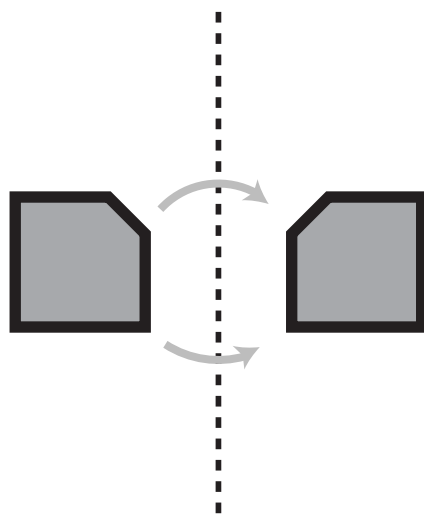


rational number

A number that can be expressed in the form $\frac{a}{b}$,
where a and b are any integers and b is not equal to zero.

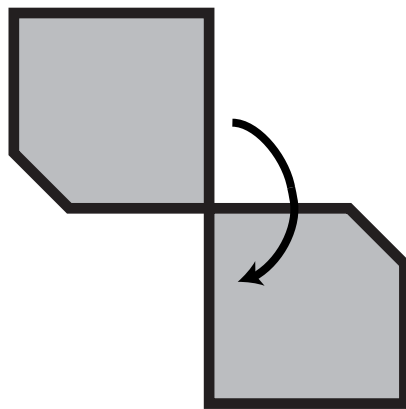
Examples: $\frac{2}{3}$, $\frac{7}{9}$, $-\frac{3}{4}$, -5 , $0, 15$

reflection



A transformation that flips a figure over a line.

rotation



A transformation that turns a figure about a given point.

rotational symmetry

If a figure can be turned less than a full turn about a given point and the figure looks exactly the way it did before the turn, that figure has *rotational symmetry*.

square number

The product of a number multiplied by itself.

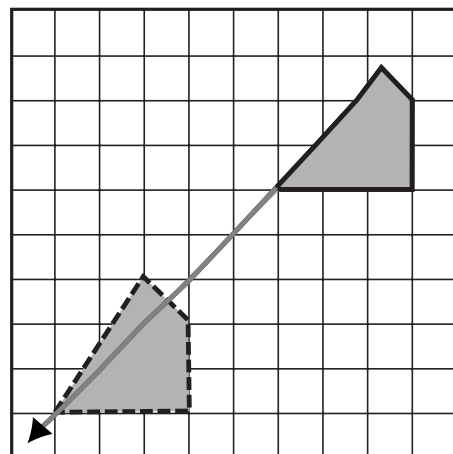
Examples: 1, 4, 9, 16, 25, 36,... are square numbers.

transformation

A transformation changes the position of a plane figure.
Some *transformations* are rotations, translations, and reflections.

translation

A *transformation* that slides a figure a given distance in a given direction.



variable

A letter that represents a number in an algebraic expression.

Example: $6 + (r \div 2)$

↑
variable

x-axis

The horizontal number line in a coordinate plane.

***y*-axis**

The vertical number line in a coordinate plane.