Numbers, Sequences, Factors

Integers:	. . . , -3, -2, -1, 0, 1, 2, 3, . . .
Rationals:	fractions, that is, anything expressable as a ratio of integers
Reals:	integers plus rationals plus special numbers such as $\sqrt{2}$, $\sqrt{3}$ and
Order Of Operations:	PEMDAS (Parentheses / Exponents / Multiply / Divide / Add / Subtract)
Arithmetic Sequences:	each term is equal to the previous term plus d Sequence: t_1, $t_1 + d$, $t_1 + 2d$, . . . Example: d = 4 and t_1 = 3 gives the sequence 3, 7, 11, 15, . . .
Geometric Sequences:	each term is equal to the previous term times r Sequence: t_1, $t_1 \cdot r$, $t_1 \cdot r_2$, . . . Example: r = 2 and t_1 = 3 gives the sequence 3, 6, 12, 24, . . .
Factors:	the factors of a number divide into that number without a remainder
Multiples:	the multiples of a number are divisible by that number without a remainder
Percents:	use the following formula to find part, whole, or percent part = percent 100 × whole

Averages, Counting, Statistics, Probability

average	average = sum of terms number of terms
average speed	total distance/total time
sum	Average*number of teerms
mode	value in the list that appears most often
median	middle value in the list (which must be sorted) Example: median of {3, 10, 9, 27, 50} = 10 Example: median of {3, 9, 10, 27} = (9 + 10)/2 = 9.5
Fundamental Counting Principle:	If an event can happen in N ways, and another, independent event can happen in M ways, then both events together can happen in N ×M ways.
SAT Prep	SAT Prep