Mathematics Vocabulary 101

PC Functions
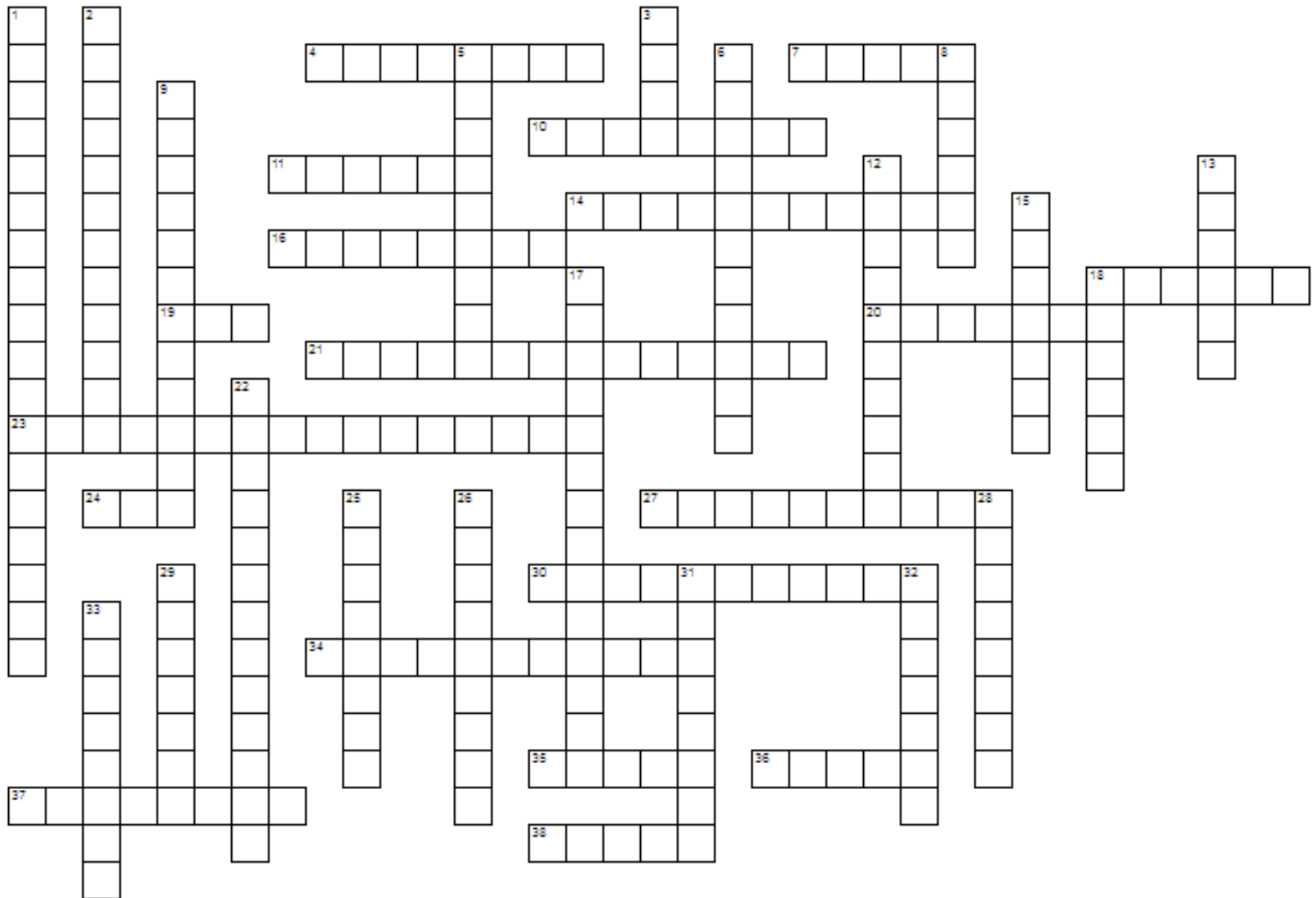
Simplify

Term

Number System

Expand

Reduce

Symmetry

Intersection

Union

Solve

Factor

Radical

Function Notation

Sum

Difference

Quotient

Product

Cancel out - What do you mean? What should we call this?

Constant

End behavior

Roots

One – to – one

Consecutive

Rationalize

Set

Elements

Corresponding

Like terms

Extrema

Parent function

Transformation

Composition

Leading coefficient

Sequence

Finite

Converge/Diverge

Series

Sigma

Arithmetic

ACROSS

4   To use the rules of arithmetic and Algebra to rewrite an expression as simple as possible.

7   Find all solutions to an equation, inequality, or a system of equations and/or inequalities.

10   A balanced arrangement of parts of a figure on opposite sides of a point, line or plane.

11   To bring down the size, quantity, or value of intensity.

14   Combining two functions by substituting one function's formula in place of each independent variable in the other function's formula.

16   The result of dividing two numbers or expressions.

18   Describes a set which does not have an infinite number of elements.

19   A group of numbers, variables, geometric figures, or just about anything. Written using these braces {}.

20   The minima and maxima of a function. May be either relative (local) or absolute (global).

21   Operations that alter the form of a figure.

23   A precise way of giving information about a function in terms of its independent variable.

24   The result of adding a set of numbers or algebraic expressions.

27   Calculations involving numbers. This typically involves the basic operations addition, subtraction, multiplication, division, and exponents.

30   The direction of the graph as x approaches negative and positive infinity.

34   Following on from each other in order. Next to or adjacent in Geometry.

35   Combining the elements of two or more sets. Indicated by the ∪ (cup) symbol.

36   A Greek letter used to represent sum in a series (Σ).

37   A term or expression with no variables.

38   A solution to an equation of the form $f(x) = 0$. May be real or complex.

DOWN

1   The coefficient of a polynomial's leading term.

2   The elements two or more sets have in common. Indicated by the ∩ (cap) symbol.

3   Parts of an expression or series separated by addition or subtraction or the parts of a sequence separated by commas.

5   Terms which have the same variables and corresponding powers and/or roots. May be combined with addition or subtraction.

6   The process by which a fraction is rewritten so that the denominator contains only rational numbers.

8   To multiply out the parts of an expression

9   An organization of numbers based on specific properties that connect all numbers in that subset.

12   The result of subtracting two numbers or expressions.

13   The sum of the terms of a sequence.

15   To fail to approach a finite limit.

17   A set of basic functions used as building blocks for more complicated functions.

18   A number or quantity that when multiplied with another produces a given number or expression.

22   Two features that are situated the same way in different objects.

25   A function for which every element of the range of the function corresponds to exactly one element of the domain.

26   To balance or neutralize equivalent terms on opposite sides of an equation or inequality.

28   To approach a finite limit.

29   The result of multiplying a set of numbers or expressions.

31   A number, letter, point, line, or any other object contained in a set.

32   The taking of a root of a number or expression.

33   A list of numbers set apart by commas. May be arithmetic or geometric.