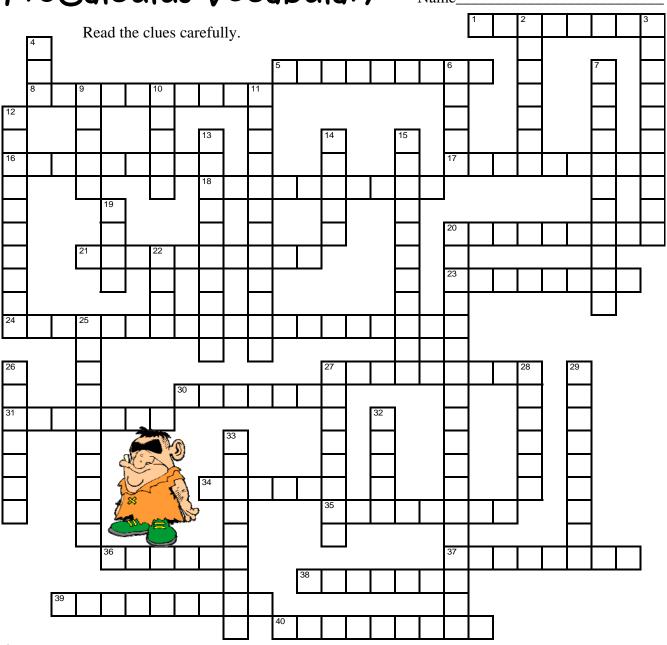
PreCalculus Vocabulary

Name_



Across

- 1 A formula useful for finding powers and roots of complex numbers is known as _____'s Theorem.
- 5 A function made up of a finite number of continuous pieces is described as _____ defined.
- 8 To find each successive term in an arithmetic sequence, add the common _____.
- 16 A method of mathematical proof typically used to establish that a given statement is true of all natural numbers.
- 17 A line that approaches a given curve arbitrarily closely.
- **18** A function with a connected graph possesses _____.
- 20 A technique for determining the number of positive or negative roots of a polynomial is known as _____' Rule of Signs.
- **21** A function whose graph moves downward as it is followed from left to right.

23 A graph such that every x in the domain is mapped to exactly on y-value.

- 24 A method of solving a quadratic equation. (3 words)
- 27 A shorthand method of polynomial division is known as _____ division.
- **30** A part of a graph which looks like all or part of an upside-down bowl is described as _____ downward.
- **31** The lowest point in a particular section of a graph is referred to as a relative _____.
- **34** The *x*-values that can be used in a function.
- 35 A polar curve that is somewhat heart shaped.
- **36** A set of basic functions used as building blocks for more complicated functions are referred to as ______ functions.
- **37** The function y = x.
- 38 The function obtained by switching the *x* and *y*-variables in a function.
- **39** The line used to term the locus of points for a parabola.
- 40 3 + 4i and 3 4i are referred to as _____ terms.

Down

- 2 The highest point in a particular section of a graph is referred to as a relative _____.
- **3** A root that appears in an equation during the process of solving another equation which is not a solution of the equation to be solved.
- **4** For function f, f(-x) = -f(x).
- 6 The Greek letter used to indicate "sum".
- 7 f(g(x)) where f and g are functions.
- 9 A parabola is the locus of points such that the distance to the _____ equals the distance to the directrix.
- **10** To find each successive term in a geometric sequence, multiply by the common _____.
- 11 In an ellipse, this number is between 0 and 1, in a parabola it is 1 and in a circle it is 0.
- **12** A sequence such as 3, 6, 9, 12, 15, ...
- 13 A function whose graph moves upward as it is followed from left to right.
- 14 y-values that are used by a function.
- 15 The number associated with a square matrix.
- **19** For function f, f(-x) = f(x).

20 The name given to
$$\frac{f(x+h) - f(x)}{h}$$
. (2 words)

- 22 The location where an equation crosses the *x*-axis.
- 25 The sum of a finite number of terms of a sequence. (2 words)
- **26** A number such as 5 + 7i.
- 27 A list of numbers set apart by commas, such as 2, 4, 6, 8, 10, ...
- **28** A method for solving a linear system of equations using determinants is called ____'s Rule.
- **29** The sequence 1, 1, 2, 3, 5, 8, 13,
- **32** Coordinates of the form (*r*, theta).
- **33** A sequence such as 4, 8, 16, 32, 64, ...