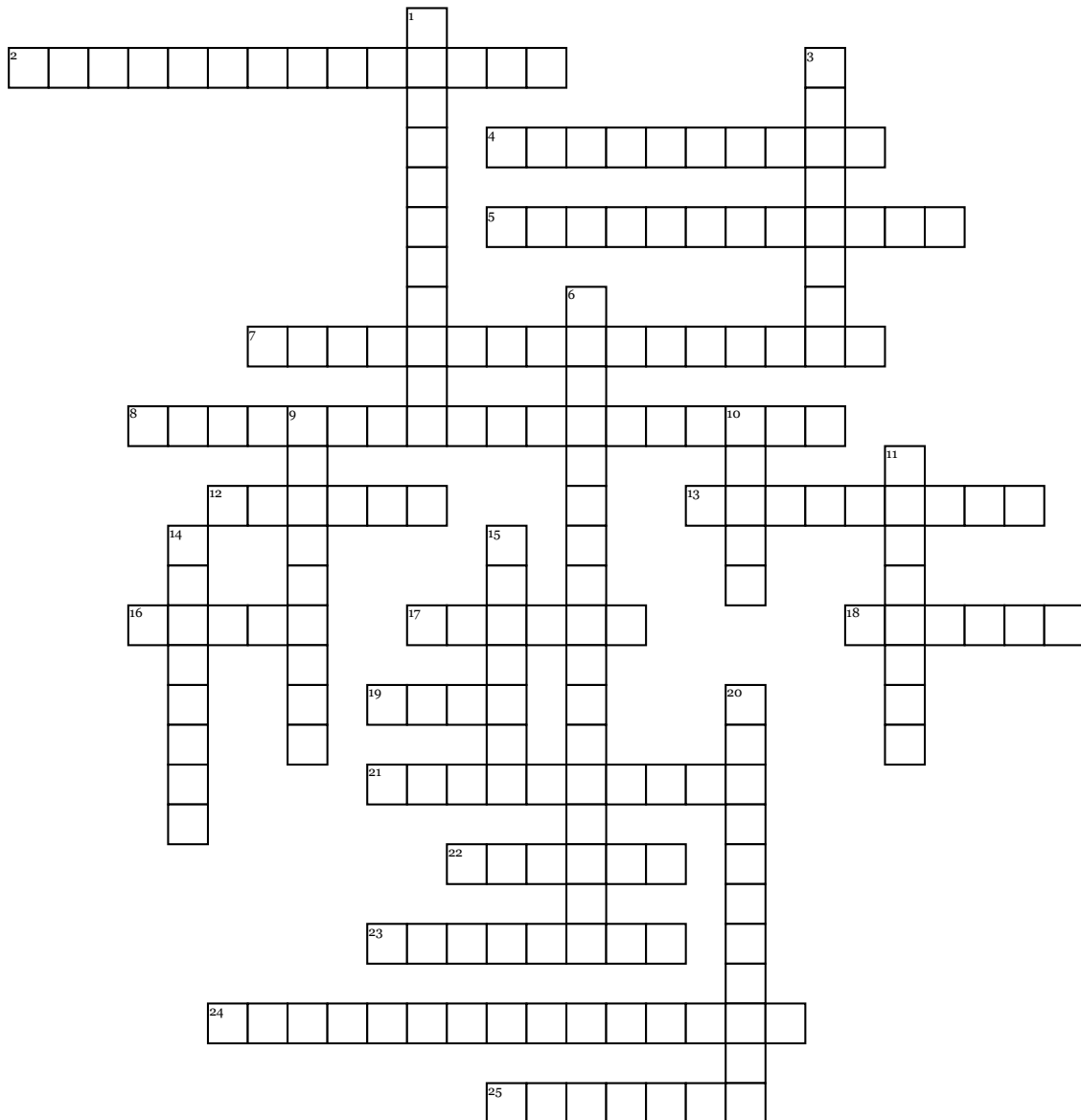


Name: _____

Crossword for Mathematicians



Across

- 2.** a triangular array of numbers in which those at the ends of the rows are 1 and each of the others is the sum of the nearest two numbers in the row above (the apex, 1, being at the top).
- 4.** an expression of more than two algebraic terms, especially the sum of several terms that contain different powers of the same variable(s).
- 5.** is primarily a branch of mathematics that deals with triangles, mostly right triangles. In particular the ratios and relationships between the triangle's sides and angles.
- 7.** a number that is expressed in terms of the square root of a negative number (usually the square root of -1 , represented by i or j).
- 8.** is a fundamental relation in Euclidean geometry among the three sides of a right triangle. It states that the square of the hypotenuse (the side opposite the right angle) is equal to the sum of the squares of the other two sides.
- 12.** a quantity having direction as well as magnitude, especially as determining the position of one point in space relative to another.
- 13.** a quantity representing the power to which a fixed number (the base) must be raised to produce a given number.

- 16.** a high school mathematician, who is a nice guy but who generally likes to use sarcasm, has a unique sense of style, and is from Michigan.
- 17.** is a curve obtained as the intersection of the surface of a cone with a plane. The three types are the hyperbola, the parabola, and the ellipse.
- 18.** the trigonometric function that is equal to the ratio of the side adjacent to an acute angle (in a right-angled triangle) to the hypotenuse.
- 19.** the trigonometric function that is equal to the ratio of the side opposite a given angle (in a right triangle) to the hypotenuse.
- 21.** is a circle with a radius of one. Frequently, especially in trigonometry, it is the circle of radius one centered at the origin $(0, 0)$ in the Cartesian coordinate system in the Euclidean plane.
- 22.** a unit of angle, equal to an angle at the center of a circle whose arc is equal in length to the radius.
- 23.** is any number that can be expressed as the quotient or fraction p/q of two integers, a numerator p and a non-zero denominator q .
- 24.** is a formula we can use to find the n th term of a sequence. In the easiest definition, explicit means exact or definite.
- 25.** are a unit of angle measure.

Down

- 1.** is the behavior of the graph of $f(x)$ as x approaches positive infinity or negative infinity.
- 3.** is any straight line segment that passes through the center of the circle and whose endpoints lie on the circle.
- 6.** is a shorthand, or shortcut, method of polynomial division in the special case of dividing by a linear factor -- and it only works in this case.
- 9.** The distance along the arc (part of the circumference of a circle, or of any curve).
- 10.** a number x is another number, which when multiplied by itself a given number of times, equals x .
- 11.** A point on a line segment that divides it into two equal parts. The halfway point of a line segment
- 14.** a relationship or expression involving one or more variables.
- 15.** A line which touches a circle or ellipse at just one point.
- 20.** is a course with university or high school level algebra and trigonometry that is designed to prepare students for the study of calculus. Schools often distinguish between algebra and trigonometry as two separate parts of the coursework.