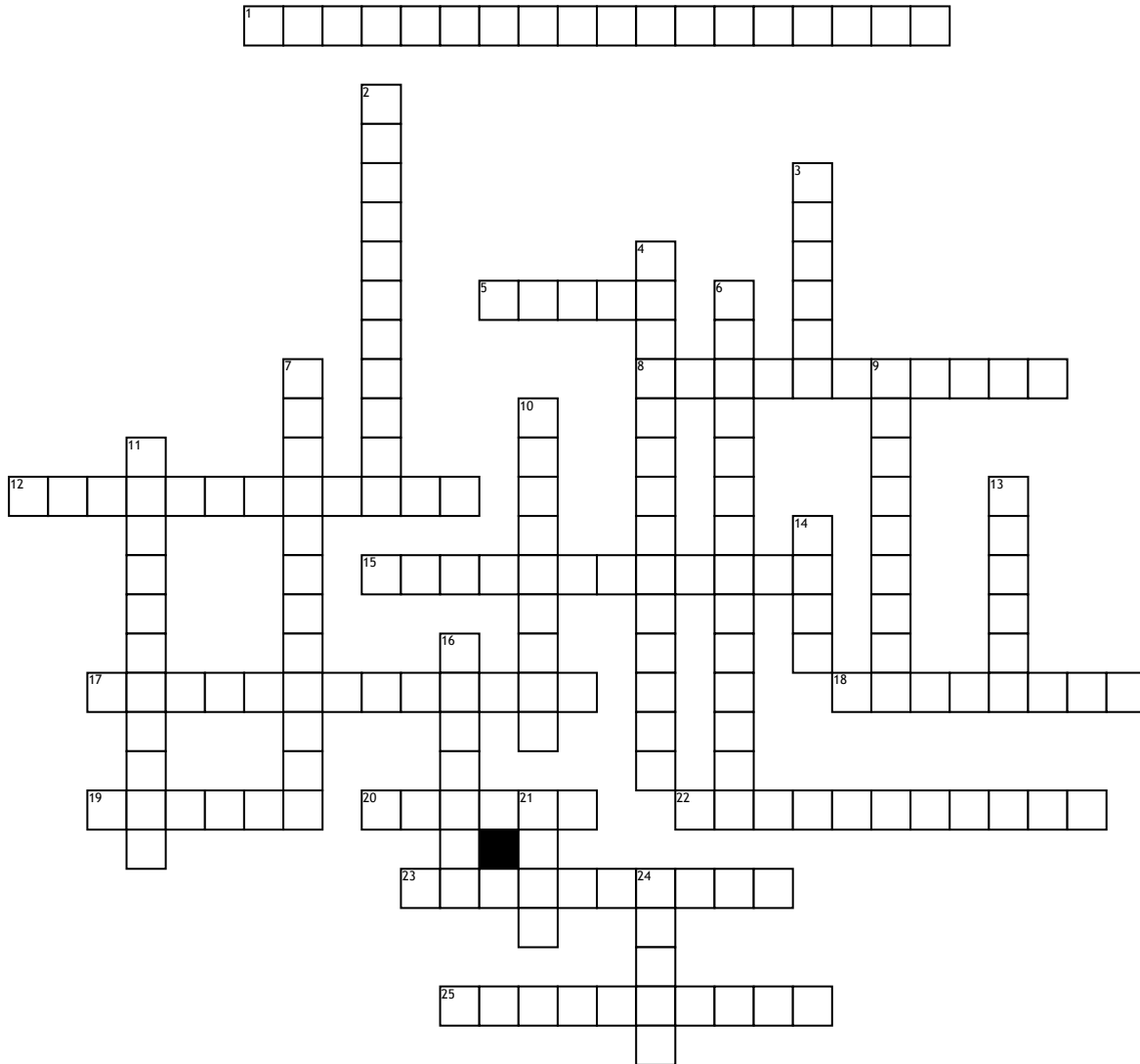


Name: _____

Date: _____

Pre-Cal Crossword Puzzle



Across

- 1. An equation relating the lengths of the sides of a right triangle. The sum of the squares of the legs of a right triangle is equal to the square of the hypotenuse.
- 5. irreducible over the reals.
- 8. A transformation in which a graph or geometric figure is moved to another location without any change in size or orientation
- 12. A system of linear equations with no solution.
- 15. A matrix with equal numbers of rows and columns.
- 17. A triangle that has a right (90°) interior angle.
- 18. A rule that associates the elements of one set with those of another set. A relation can also be thought of as all of the ordered pairs which satisfy the rule.
- 19. The set of values of the independent variable(s) for which a function or relation is defined. Typically for functions, this is the set of x-values that give rise to real y-values.

20. A corner or a point where lines meet. "Highest point"

- 22. A system of equations in which no equation is a linear combination of the others.
- 23. When the plane passes through the apex of the cone, one of three possible degenerate cases will occur (a straight line, a point, or a pair of intersecting lines).
- 25. A function that has an inverse.

Down

- 2. Any line with a positive or negative slope.
- 3. A line segment connecting the center of a circle or sphere with a point on the circle or sphere. The word radius also refers to the length of this segment.
- 4. The midpoint of the major axis of an ellipse or transverse axis of a hyperbola.
- 6. A change in the location or specific shape of a parent function, without changing its general shape

7. A method used to eliminate one of the variables by replacement when solving a system of equations.

- 9. A line that a curve approaches, as it heads towards infinity.
- 10. The name for the graph of the reciprocal function.
- 11. A function operation symbolized $(f \circ g)(x)$ that is equivalent to $f(g(x))$.
- 13. line of a curve is a line that (locally) intersects two points on the curve..
- 14. also known as the axis of symmetry.
- 16. A relation which assigns a correspondence from the elements of the range to those of the domain. The inverse of a function or relation can be found by interchanging the variables in the function or relation.
- 21. if the graph of f is symmetric with respect to the y-axis.
- 24. The x-values for which $f(x)=0$