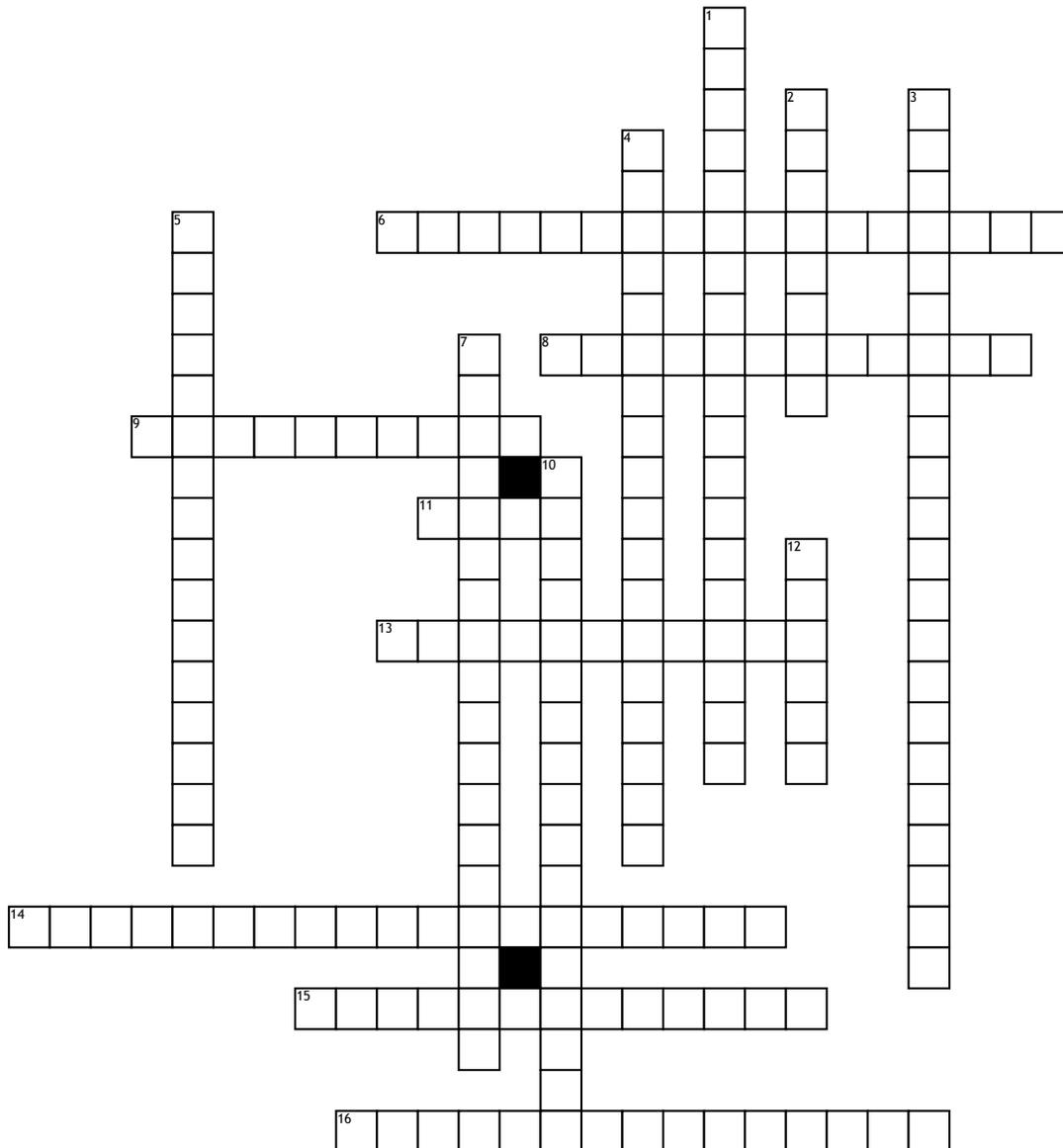


# Unit 6 Project



## Across

6. is a shortcut method for dividing a polynomial by a simple divisor of the form  $(x - n)$ . The divisor must be of that form

8. When solving an equation with rational expressions as terms, you determine the LCD and then multiply both sides of the equation by the LCD to eliminate all the \_\_\_\_\_.

9. the relation between two expressions that are not equal, employing a sign such as "not equal to," > "greater than," or < "less than."

11. A \_\_\_\_\_ exists on the graph of a rational function at any input value that causes both the numerator and denominator of the function to be equal to zero.

13. When \_\_\_\_\_ rational expressions, Multiply the numerators together. Multiply the denominators together. Simplify the "new" fraction by canceling common factors when possible.

14. If the polynomial in the numerator is a lower degree than the denominator, the x-axis ( $y = 0$ ) is the \_\_\_\_\_.

15. the point at which a function is discontinuous or undefined

16. a fraction where the numerator, denominator, or both contain a fraction

## Down

1. the smallest positive integer that is divisible by both a and b

2. When \_\_\_\_\_ rational expressions Step 1: Completely factor both the numerators and denominators of all fractions. Step 2: Change the division sign to a multiplication sign and flip (or reciprocate) the fraction after the division sign; essential you need to multiply by the reciprocal. Step 3 : Cancel or reduce the fractions

3. the lowest common multiple of the denominators of a set of fractions.

4. a solution that emerges from the process of solving the problem but is not a valid solution to the problem

5. The steps to solve \_\_\_\_\_ equations are: Find the common denominator. Multiply everything by the common denominator. Simplify. Check the answer(s) to make sure there isn't an extraneous solution.

7. \_\_\_\_\_, or fractions containing polynomials, can be simplified much like fractions can be simplified

10. To find the \_\_\_\_\_, of a rational function, set the denominator equal to 0 and solve for x.

12. If the polynomial in the numerator is a higher \_\_\_\_\_ than the denominator, there is no horizontal asymptote.