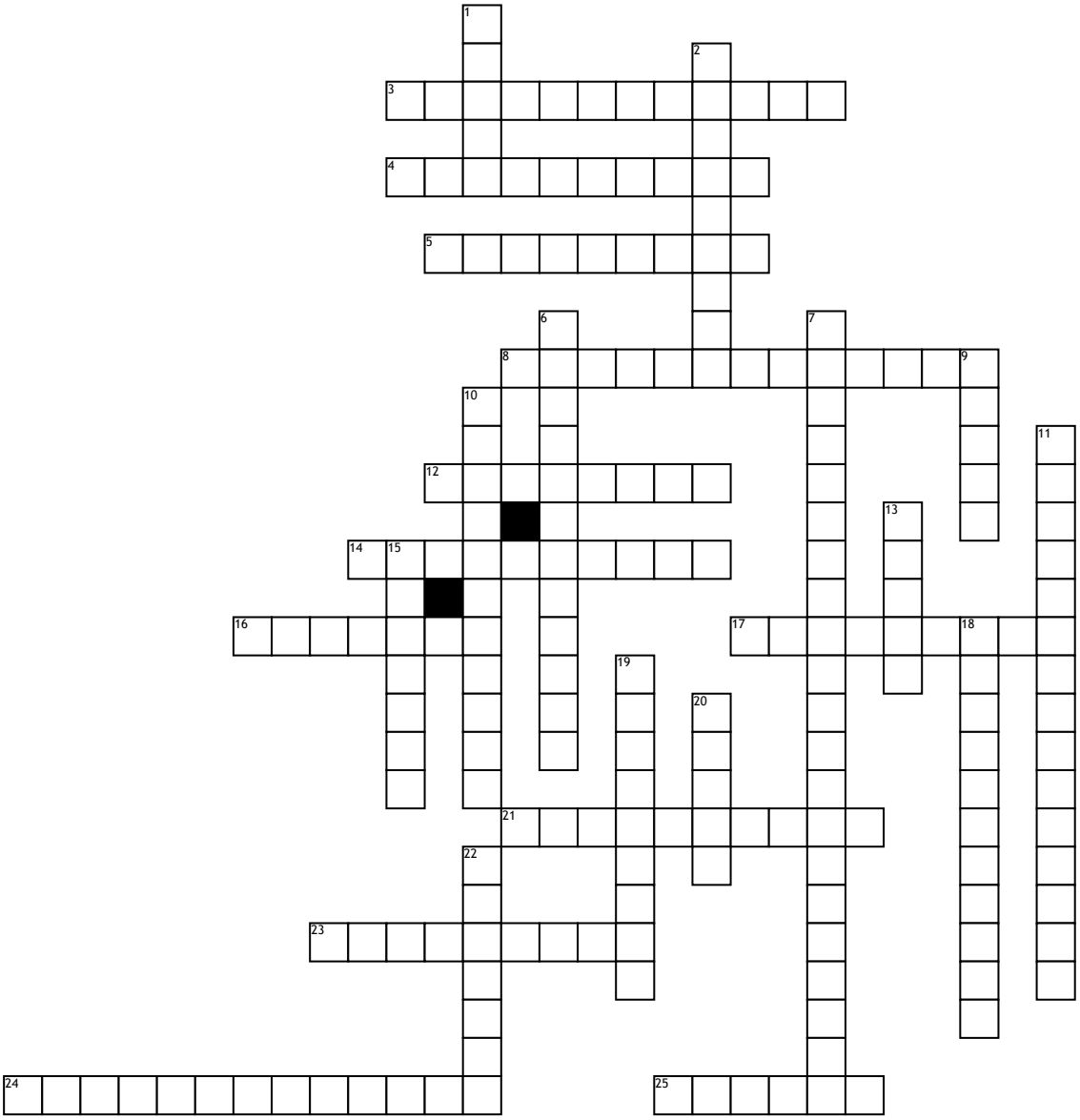
Name: _____ Date: _____

Calculus



Across

3. Which theorem guarantees the existence of an absolute max and min for a continuous function over a closed interval?

4. What rule is used to evaluate limits of fractions that evaluate to indeterminate expressions (ex. 0/0)?

5. What theorem says that there exists a number c on (a,b) such that f'(c)=(f(b)-f(a))/(b-a)

8. When the graph of a function is not connected what is the function?

12. What convergence test is used for positive series with decreasing terms?

14. What is an equation that has more than one dependent variable called? (Hint: x=4t-2t^3)

16. Which theorem allows for the computation of the limit of an expression by "squeezing" the expression between two other expressions?

17. What type of series converges if its common ratio is between -1 and 1?

21. What is 2x+3 in relation to x^2+3x?

23. What method is used for finding the derivative of a composition of functions?

24. What is the point at which a function changes from increasing to decreasing and vice versa called?

25. What is Mrs. Bithi's favorite BC topic?

Down

1. What test is given by the limit as n approaches infinity of the absolute value of a sub(n+1) divided by a sub(n)?

2. What type of series is a Taylor series expansion of a function about 0?

6. What type of equation shows a relationship between a function and its derivative?

7. What is the set of values for which a series converges called?

9. What technique is used for finding the volume of a solid of revolution? (Hint: BC topic)

10. The _____ Theorem of Calculus establishes the connection between derivatives, antiderivates, and definite integrals.

11. What is the point at which a curve changes its concavity called?

13. What type of series represents a function as a polynomial that goes on forever?

15. What kind of value does 1/(b-a) multiplied by the integral from a to b of f(x) with respect to dx give?

18. What is Mrs. Bithi's favorite AB topic? (Hint: way to approximate an integral)

19. What is the difference between the nth partial sum and the sum of a series called?

20. What type of function's area is given by .5 times the integral of r^2 with respect to dtheta?

22. What type of line touches a curve at a point where its slope is the same as the slope of the curve at that point?