## MJ4MF FINAL EXAM

NAME:

DATE: \_\_\_\_\_

- 1. Do one of the following:
  - Give a detailed proof of the classification of finite simple groups; or,
  - Write both your first and last name in uppercase letters on the NAME line above.
- 2. Why is 6 afraid of 7?
- 3. Which months have 28 days?
- 4. What do you call 3 feet of trash?
- 5. Take five times *which* plus half of *what*, And make the square of what you've got. Divide by one-and-thirty squared, To get just four — that's right, it's there. Now two more points I must impress: Both *which* and *what* are fractionless, And *what* less *which* is not a lot: Just two or three. So now, what's *what*?
- 6. What is the product of (x a)(x b)(x c) ... (x y)(x z)?
- 7. How much wood could a woodchuck chuck, if a woodchuck could chuck wood?
- 8. Identify each of the objects below.



9. Identify the three mistakes:

This sine contains three errors.



## Provide accurate conversions for each of the following.

- 10.  $10^{12}$  bulls = \_\_\_\_\_
- 11. 2 paradigms = \_\_\_\_\_
- 12.  $10^{-12}$  boos = \_\_\_\_\_
- 13. 2000 mockingbirds = \_\_\_\_\_

14. Match each word on the left with its definition on the right.

Arc	What mathematicians sleep on
Binary	Two MD's
Matrices	A canary with two heads
Paradox	What the pirate said when his bird flew away
Polar Bear	That which Noah built
Polygon	A rectangular bear after a coordinate transformation

## True or False

15. According to the four-color theorem, any map can be colored with three (or fewer) colors.	
16. Pi is irrational but well-rounded.	
17. Most people have more than the average number of arms.	
18. This question is false.	

