

## MATH 1300, Mathematical Explorations

# Numeracy

### Assignments

1. Do Investigations 107-114 in Chapter 5 of the [patterns](#) book. (You should see a photo of Britney Gallivan.) Are you surprised by how big the numbers got? If I tell you the rule of thumb “10 powers of 2 is about 3 powers of 10” would it help?
2. How much bread does it take to feed one person for a day? How much flour do you think it takes to feed a person (assuming that bread is simply flour and water)? How much wheat does it take to feed one person for one day? (Please cite the data you look up and explain your calculations.)
3. Look up the “Wheat and Chessboard” problem on Wikipedia. Solve the problem. According to problem 2, how many people would one chessboard of wheat feed? What about just the first half of the chessboard? Is this surprising? (Expected length: 2 paragraphs.)
4. What do you think of the concept of “numeracy”? What role do you think it plays in our lives? How important do you consider it? You may want to read some articles that have appeared in the popular press about numeracy. (Expected length: 2-3 paragraphs.)

### References and resources

[The Art of Mathematics: Patterns](#)

[Wikipedia: Wheat and Chessboard Problem](#)