BCP / AMDG
Discrete Math

Name: _____
Fall Semester 2007

Class Notes

Organizing & Describing Patterns via Modular Arithmetic

The maximum number times Friday the 13th can occur in a year is…

The 13th of	Corresponding Day of Year	Appears in Column
JAN		
FEB		
MAR		
APR		
MAY		
JUN		
JUL		
AUG		
SEP		
OCT		
NOV		
DEC		

Analysis Questions

Answer the following on a separate sheet of loose-leaf paper providing a complete explanation of how you arrived at your answer to the following questions. Be sure to use complete, grammatically correct sentences.

1. Explain why it is not necessary to write out the entire chart to predict into which column a number falls.
2. Explain how you find the corresponding day of the year for the 13th of each month without counting completely.
3. Explain/Describe how a leap year affects the charts were constructed.
4. Explain why it is impossible to avoid having a Friday the 13th in any given year.
5. What is the most number of Friday the 13ths possible in any given year? What is the fewest?