MA/CSSE 473 Day 06 Announcements and Summary

Announcements:

- 1. HW 3 Due Tonight at 11:55PM.
- 2. Exam dates: Tuesday Sept 30, Tuesday, November 4. In-class. Not in schedule page yet.
 - o If you are allowed extra time for the exam and plan to use that time, please talk with me soon about timing.

| 3. | Don't use a pirated copy of the textbook! |
|----|--|
| Ma | in ideas from today: Prove by induction that in an Odd Pie Fight, at least one participant does not get hit by a pie. |
| 2. | What problem does Euclid's Algorithm solve? |
| 3. | Show the recursive calls for Euclid's Algorithm applied to a=188 and b=144. |
| 4 | The following two conditions involve that do god(a b): |
| 4. | The following two conditions imply that $d = gcd(a,b)$: |
| | a. |
| | b. |

| 5. | Use the extended Euclid algorithm to find integers x and y such that $x*25 + y*11 = 1$. |
|------------|--|
| 6 | r is an inverse of m (mod N) iff $rm \equiv 1 \pmod{N}$. |
| υ. | Show that a number m cannot have two different inverses (mod N) that are both in range 1 N-1 |
| 7 | What is the inverse of 11 (mod 25)? |
| <i>/</i> . | what is the liverse of 11 (mod 23): |
| | |