Anna Zhebrun
p1

Attendance 09/08

1. The greatest mathematician according to Internet:
   Archimedes

2. What was the undergraduate institution of Denis DeTurck?
   Drexel University

3. What ~~university~~ does S stand for in RSA?
   Adi Shamir
   University attended: Tel Aviv University

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Part II

1. a) $7/12 = \frac{1}{2} + (\frac{7}{12} - \frac{1}{2})$ (because ceiling of $\frac{7}{12} = 2$)
   $= \frac{1}{2} + \frac{1}{12}$

   → Divide 6 pizzas in half and give each person 1/2 of a pizza. Then divide the 7th pizza into 12 pieces and give each person 1/12 of that pizza.

   b) $7/12 = 1/3 + 1/4$

   → Divide 4 pizzas into 3 pieces and give each person a piece. Then divide 3 pizzas into 4 pieces and give each person a piece.

   → This way is better because it gives simpler fractions that are easier to understand and work with.

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2 $x \equiv 1 \pmod 3$ $x \equiv 2 \pmod 5$

Consider $f(x) = (x \bmod 3,\ x \bmod 5)$

Then

$f(5) = (2,0)$ $f(6) = (0,1)$ $f(7) = (1,2)$

then $f(x) = (1,2)$ when $x = 7 + 15k$

so the two smallest numbers with mod $3 = 1$ and mod $5 = 2$ are: 7 and 22

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