

Attendance Quiz # 1 for Dr. Z.'s MathHistory for Lecture 1 (due no later than 10 minutes after class)

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Email to DrZlinear@gmail.com right after class

Subject: p1

with an attachment p1FirstLast.pdf

Part I: List all the "attendance questions" during the lecture, followed by your answers.

Part II:

1. (a) Use the **greedy algorithm** to express $\frac{7}{12}$ as an Egyptian fraction. Use this to equally divide 7 pizzas among 12 people.

$$x = 7/12; \frac{1}{x} = \frac{12}{7}; \text{Ceil}(\frac{12}{7}) = 2; \frac{1}{2} + \text{EF}(7/12 - \frac{1}{2}) = \frac{1}{2} + \text{EF}(\frac{1}{12})$$

$$\text{EF}(\frac{7}{12}) = \frac{1}{2} + \frac{1}{12}$$

Split 6 pizzas in half so each person gets half a pizza
Split the remaining pizza into 12ths and each person gets a 12th

(b) Note that a better way to express $\frac{7}{12}$ as an Egyptian fraction is

$$\frac{7}{12} = \frac{1}{3} + \frac{1}{4}$$

Use this better way to equally divide 7 pizzas among 12 people. Why is it better?

Split 4 pizzas into ~~3~~ thirds and each gets a third
Split the remaining 3 pizzas into fourths and each person gets a fourth

2. Find the two smallest positive integers n , that have the property that

- If you divide n by 3 you get remainder 1 .
- If you divide n by 5 you get remainder 2 .

Based on the table in the notes

$$n = 7$$

Quin Buob

AQ 1: According to google, who is the greatest mathematician?
Sir Isaac Newton

AQ 2: What was the undergraduate institution of
Dennis Detuch?
Drexel University

AQ 3: What university is the S in RSA Algorithm
recieve his Ph. D from?
Weizman Institute