p1EdwardChung

Wednesday, September 8, 2021 3:10 PM

1) Who is the greatest mathematician?
(according to Google)

Archimedes

2) What was the undergrad for Dennis DeTurck?

Drexel University

3) What undergrad did S from RSA go to?

S = Adi Shamir

Tel Aviv University

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.

ceil $(\frac{12}{7}) = 2$ $\quad \frac{7}{12} - \frac{6}{12} = \frac{1}{12}$

$= \frac{1}{2} + \frac{1}{12}$

6 pizzas in halves $(\frac{1}{2})$

1 pizza in twelfths $(\frac{1}{12})$

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

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

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

4 pizza's into $(\frac{1}{3})$'s

3 pizzas into $(\frac{1}{4})$'s

Better b/c it's easier to eat?

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 .

$n \bmod 3 = 1$ $\qquad 3 \cdot 5 = 15$

. $\qquad 15 - 2$

$n \mod 5 = 2$

$n = 7, 22$

$7 + 15 = 22$