

$$\cancel{2 \times 5^0} + \cancel{2 \times 5^1} + \cancel{2 \times 5^2} + \cancel{2 \times 5^3}$$

## Quin Buch

### Attendance Quiz 1

1) Who was Kurt Gödel?

Greatest Mathematician of the 20<sup>th</sup> century  
Died in 1978

2) At what age did Gauss develop  $\frac{N \times (N+1)}{2}$ ?  
Age of 8

$$\begin{aligned} 3) 54 \times 56 &= (5 \times 10 + 4 \times 1) \times (5 \times 10 + 6 \times 1) \\ &= (2 \times 10 + 5) \times (1 \times 100 + 2 \times 10 + 0 \times 1) + 25 \\ &= 3024 \end{aligned}$$



Attendance Quiz # 0 for Dr. Z.'s MathHistory for Lecture 0 (due no later than 10 minutes after class)

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Email to DrZlinear@gmail.com right after class

Subject:p0


with an attachment p0FirstLast.pdf

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

Part II:

1. (a) Express the number one hundred eighty two (in our usual, base ten, notation) in terms of powers of 5.

$$182 = 125 + 25 + 25 + 5 + 2$$

$$= 5^3 + 2 \times 5^2 + 5^1 + 2 \times 5^0$$


- (b) Use the the above to express one hundred eighty two (expressed in our usual, base ten, notation) in base five.

1212

2. What is the decimal name of the integer that is called "One million and one" in base 2?

1,000,001

$$\cancel{1 \times 2^0 + 0 \times 2^1 + 0 \times 2^2 + 0 \times 2^3 + 0 \times 2^4 + 0 \times 2^5 + 0 \times 2^6} \\ 1 \times 2^0 + 0 \times 2^1 + 0 \times 2^2 + 0 \times 2^3 + 0 \times 2^4 + 0 \times 2^5 + 1 \times 2^6 = \boxed{65}$$