SAN PΣDRO'S NOTEBOOK

Vol. 1: Diary and Mathematics

FORMULAS AND THEOREMS

Triangular Numbers

$$\Sigma = \frac{n(n+1)}{2}$$

Let it be known that the Triangular Numbers are like finding the **sum** of a specifc problem or an equation. **n** being the total objects given and divide by **2** later in the equation.

This is actually one of my favorite formulas in all of mathematics. It's so simple and very interesting in many ways. Additionally, not only the Triangular Numbers is one of my favorite formulas, but the formula:

$$e^{i\pi} + 1 = 0$$

this formula here is called **Euler's Identity** where in his constant, e is raised to the complex number, i, and pi, π. This formula part, $e^{i\pi}$, is equal to -1 itself. If you add in $+1$, you would get the perfect number of 0.

Euler, one of my reasons to love mathematics and devote my life just like his works. Without the works of Euler, all of this will not be made if it wasn't for him. Thank you, Mentor.

Random solving

1. $64^{\frac{2}{3}} = 16$
   Solution:

$$\sqrt[3]{64}^2 \rightarrow 4^2 \rightarrow \boxed{16}$$

DIARY