Week 1 Day 2

Positive Mathematical Experience

Turn to someone sitting near you (maybe someone you haven't met before!), and take about 2 minutes to discuss:

What's one positive mathematical experience you've had in your life so far? Were other people involved in the experience? What specifically about the experience made it positive?

Any type of experience that comes to mind counts: a class you've taken, a topic you've studied, a mathematical competition you've participated in, a math study session you had with friends, a mathematical interaction with your parents, or whatever else comes to mind.

Vectors in $\mathbb{R}^n$

1. (A) True or (B) False? $(2, 1, 6)$ is in the span of $(2, 0, 3)$ and $(1, 3, 0)$.

2. For x a real number, the vector $(x, 1, 3)$ is a linear combination of $(1, 0, 4)$ and $(5, 0, 1)$ for...

(A) No values of x.

(B) Some values of x.

(C) All values of x.

3. For x a real number, the vector (x, x, x) is in the span of $(1, 2, 1)$ and $(2, 1, 2)$ for...

(A) No values of x.

(B) Some values of x.

(C) All values of x.