A Baseless Number System

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March 12, 2016

Abstract

Let's explore a number system, where the number you're trying to describe is represented by the unique points formed by infinitely extending lines.

1 Motivation

Honestly, I don't know, let's explore the properties of this system, and see what we find.

2 Equality

First: What differentiates two representations of the same number? The number 1 for example has an infinite amount of representations (any 2 lines that are neither coincident, nor parallel can form the number 1). So let us say that two representations of a number are identical if they use the same number of lines. This way, the following representations of 1 are identical.

Figure 1: Identical representations of 1



3 Examples