

(K)Not String Theory

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MathsJam 2025

Hi, I'm Laurence.

Acknowledgements

- Vanessa Madu
- Nick Winstone

Plan

- Setup
- Start at $N=0$
- Demonstration swirlies
- Katie throws the penguin
- Return to $N=0$
- Magic!

Switch to visualiser.

$$N \in \mathbb{Q}$$

-	A
AB	B
AC	C
AD	D
BC	ABC
BD	ABD
CD	ACD
ABCD	BCD

$$N \in \mathbb{Q}$$

-	A
$AB \rightarrow N + 1$	B
AC	C
AD	D
BC	ABC
BD	ABD
CD	ACD
ABCD	BCD

$$N \in \mathbb{Q}$$

—		A
AB	\rightarrow	$N + 1$
AC		B
AD		C
BC		D
BD		ABC
CD	\rightarrow	$N + 1$
$ABCD$		ABD
		ACD
		BCD

$$N \in \mathbb{Q}$$

—		A
AB	\rightarrow	$N + 1$
AC		B
AD		C
BC		D
BD		ABC
CD	\rightarrow	ABD
$ABCD$	\rightarrow	ACD
$\frac{-1}{N}$		BCD

$$N \in \mathbb{Q}$$

-		A	\rightarrow	N	
AB	\rightarrow	N + 1	B	\rightarrow	N
AC			C	\rightarrow	N
AD			D	\rightarrow	N
BC			ABC		
BD			ABD		
CD	\rightarrow	N + 1	ACD		
ABCD	\rightarrow	$\frac{-1}{N}$	BCD		

$$N \in \mathbb{Q}$$

$-$	\rightarrow	N	A	\rightarrow	N
AB	\rightarrow	$N + 1$	B	\rightarrow	N
AC			C	\rightarrow	N
AD			D	\rightarrow	N
BC			ABC		
BD			ABD		
CD	\rightarrow	$N + 1$	ACD		
$ABCD$	\rightarrow	$\frac{-1}{N}$	BCD		

$$N \in \mathbb{Q}$$

$-$	\rightarrow	N	A	\rightarrow	N
AB	\rightarrow	$N + 1$	B	\rightarrow	N
AC	\rightarrow	$\frac{1}{2-N}$	C	\rightarrow	N
AD	\rightarrow	$\frac{N}{1-N}$	D	\rightarrow	N
BC	\rightarrow	$\frac{N}{1-N}$	ABC	\rightarrow	$\frac{1}{1-N}$
BD	\rightarrow	$\frac{-2N-1}{N}$	ABD	\rightarrow	$\frac{-N-1}{N}$
CD	\rightarrow	$N + 1$	ACD	\rightarrow	$\frac{1}{1-N}$
$ABCD$	\rightarrow	$\frac{-1}{N}$	BCD	\rightarrow	$\frac{-N-1}{N}$

Back to visualiser.