## What is a Logarithm? Exploration

Counting by (+1) system

$$
\begin{aligned}
& 4+3= \\
& 4+(-1)=
\end{aligned}
$$

$$
2+(-5)=
$$

Counting by a ( +n ) system (Theoretical)

Counting by (+2) system

Counting by a (+8) system

But what if we wanted a system of counting where multiplying by a number created each new step?

## Multiplying by n system (xn) (Theoretical)

Counting by a (x2) system


Counting by a (x3) system

Counting by a (x81) system

Counting by a (x5) system

