

PAPER FOLDING

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**No piece of paper
can be folded in
half more than 7
times**

IT MUST BE A FOLD THAT FOLDS IN HALF

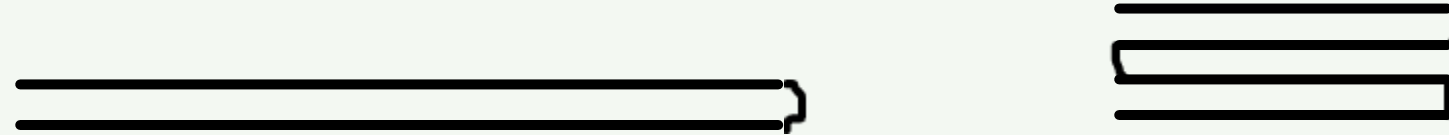
PAPER FOLDING

**WHAT COULD
HELP US TO
GET MORE
THAN 7 FOLDS?**

PAPER FOLDING



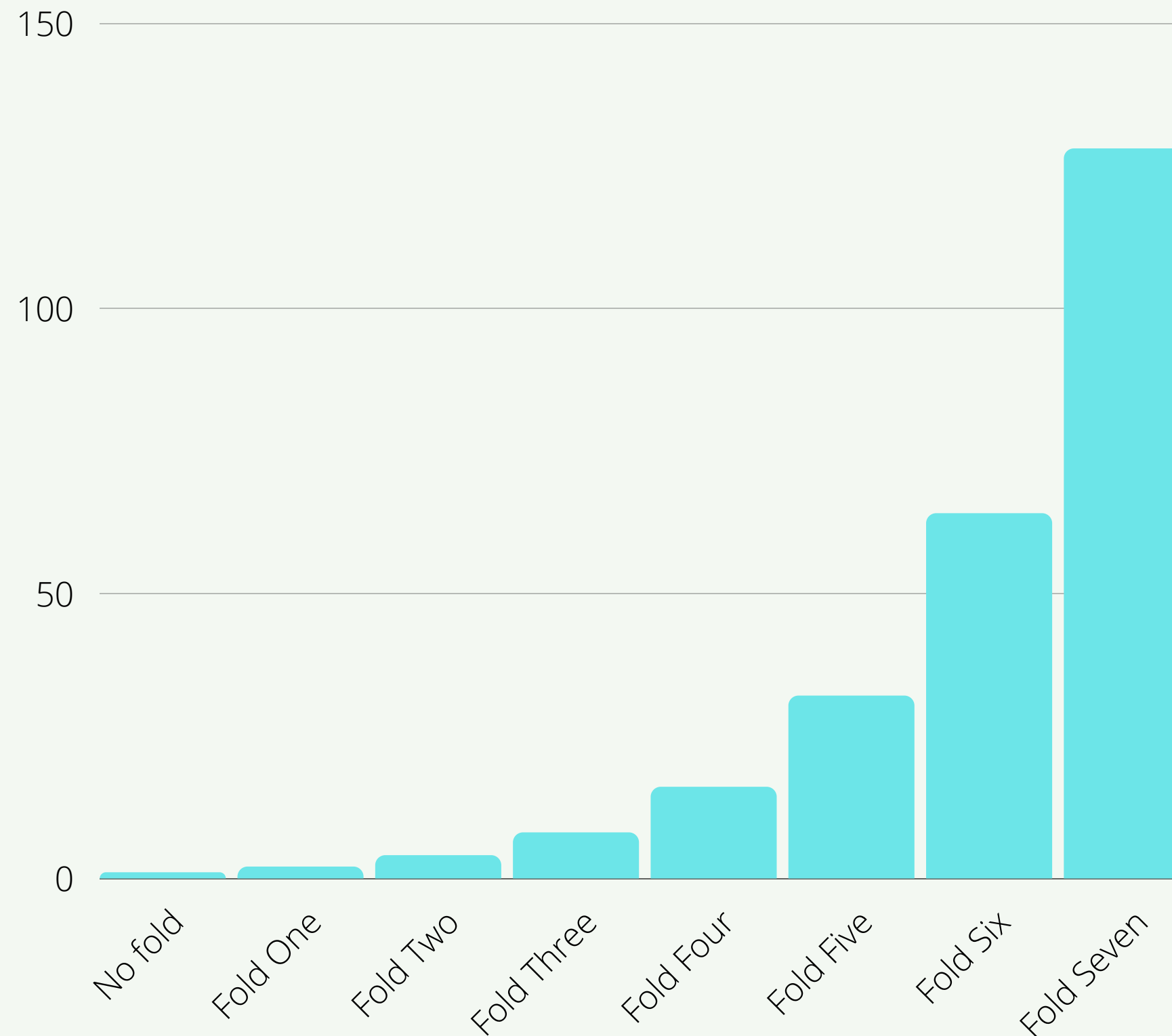
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How many layers for 7 folds?

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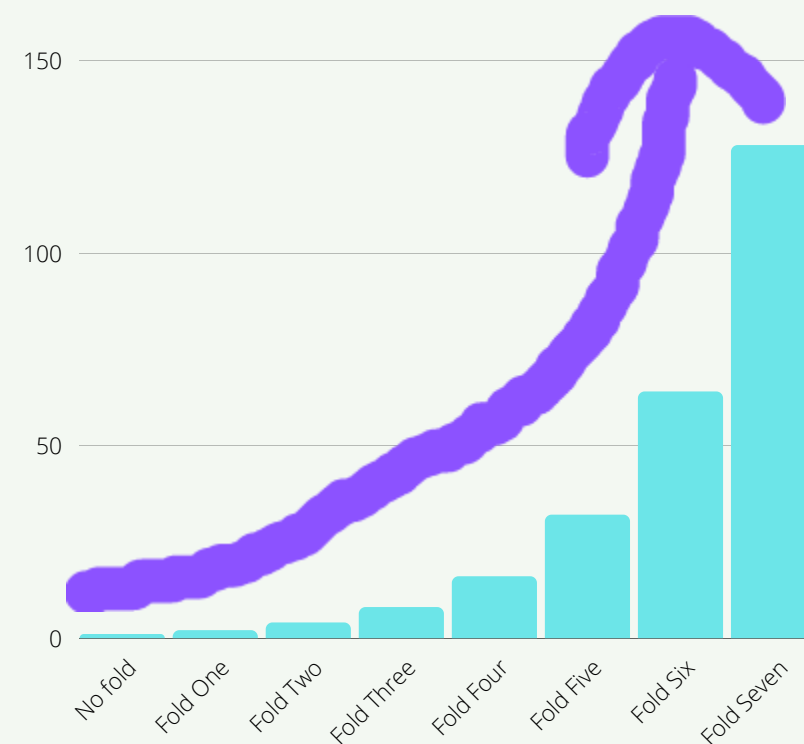
How many layers for 7 folds?



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How many layers for 7 folds?

Exponential Growth



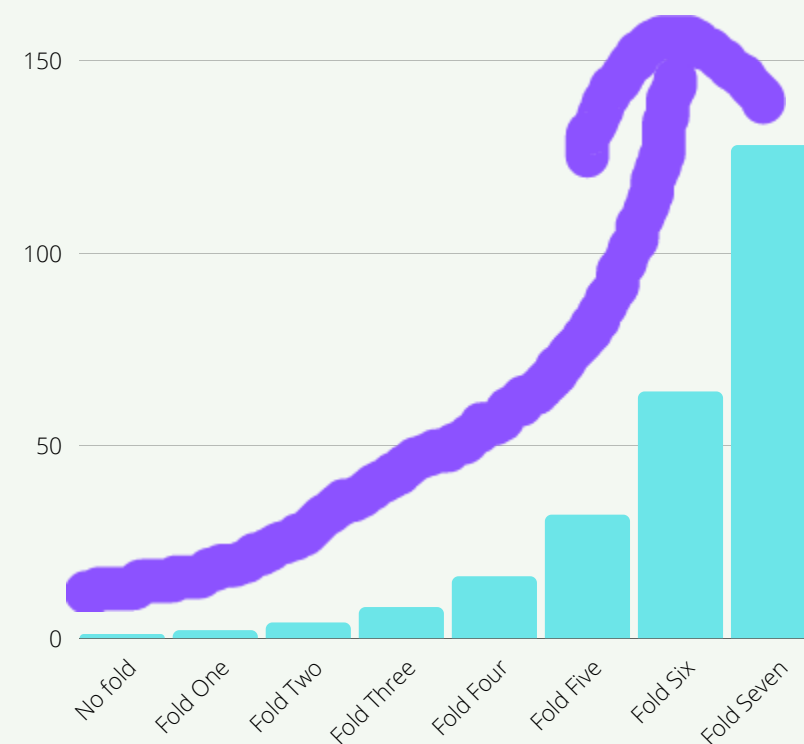
$$2^n$$

Each step multiplies by 2, it starts slow but doubling every time means the numbers get BIG quickly

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How many layers for 7 folds?

Exponential Growth



$$2^n$$

$$2 \times 2$$

$$2 \times 2 \times 2$$

$$2 \times 2 \times 2 \times 2$$

Each step multiplies by 2, it starts slow but doubling every time means the numbers get BIG quickly

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How many layers for 30 folds?

**if one layer is 0.08mm, how thick
is ten folds?**

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How many
folds?

What do you
guess first?

Height of a two storey house	5m	
Height of Mount Everest	8,849 m	
distance to the Moon	384,400 km	
distance to the Sun	149.6 million km	

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How many
folds?

What do you
guess first?

Height of a two storey house	5m	16
Height of Mount Everest	8,849 m	27
distance to the Moon	384,400 km	42/43
distance to the Sun	149.6 million km	51