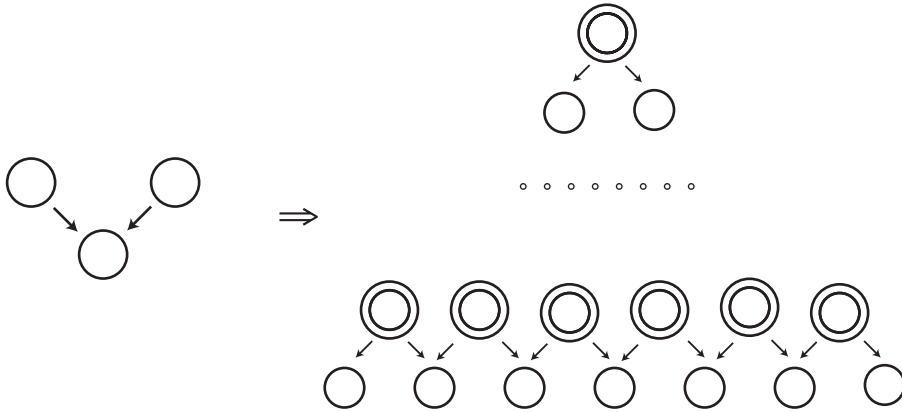


## Proof Without Words: Sum of a Row in Pascal's Triangle

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**Theorem.** The sum  $s_n$  of entries in the  $n$ th row of Pascal's triangle is equal to  $2^{n-1}$ .

*Proof.*



$$s_1 = 1, s_2 = 2, \dots, s_n = 2s_{n-1} \implies s_n = 2^{n-1}.$$

**Summary.** Using Pascal's identity, we visually demonstrate that the sum of entries in a row of Pascal's triangle is a power of two.

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