

Prove that for every $n \geq 0$:

$$\sum_{i=0}^n i = \frac{n(n+1)}{2}$$

Base case(s):

Inductive Hypothesis: Assume ...

Inductive Step: Then show...

Prove that for every $n \geq 0$:

$$\sum_{i=0}^n 2^i = 2^{n+1} - 1$$

Base case(s):

Inductive Hypothesis: Assume ...

Inductive Step: Then show...

Practice at home: Prove $0^3 + 1^3 + \dots + n^3 = (0 + 1 + \dots + n)^2$