

LaTeX document for LAFF class notes

Homework 1.3.4.1:

Let $n \geq 1$. Then $\sum_{i=1}^n i = n(n+1)/2$

Answer : Always

Homework 1.3.4.2

Let $n \geq 1$.

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

Answer: Always

Homework 1.3.4.3

Let $n \geq 1$ and $x \in \mathbb{R}$.

$$\sum_{i=0}^{n-1} x = x + x + \dots + x = nx$$

Answer: Always

Homework 1.3.4.4

Let $n \geq 1$.

$$\sum_{i=0}^{n-1} i^2 = (n-1)n(2n-1)/6$$

Answer: Always