

# Math 248: Lab 2

September 1, 2025

Timothy Tarter

**Compute the arithmetic mean and geometric mean of each set of numbers.**

**[10, 5, 2, 5]**

**Arithmetic Mean**

$$\frac{10 + 5 + 2 + 5}{4} = \frac{22}{4} = 5.5 \quad (1)$$

**Geometric Mean**

$$(10 * 5 * 2 * 5)^{\frac{1}{4}} = 500^{0.25} = 4.73 \quad (2)$$

**[4,4,4,4,4]**

**Arithmetic Mean**

$$\frac{4 + 4 + 4 + 4 + 4}{5} = 4 \quad (3)$$

**Geometric Mean**

$$(4^5)^{\frac{1}{5}} = 4 \quad (4)$$

**[0,1,2,3,4,5]**

**Arithmetic Mean**

$$\frac{0 + 1 + 2 + 3 + 4 + 5}{6} = \frac{15}{6} = 2.5 \quad (5)$$

**Geometric Mean**

$$(0)^{\frac{1}{6}} = 0 \quad (6)$$