

3D Geometric Series

Proof:

1. Find the sum of the following Geometric Series:
 $2 + 6 + 18 + 54\dots$ (for 10 terms)

2. Find the sum of the following Geometric Series:

$$1024 - 512 + 256 - 128 + \dots + 1$$

3. Find the least value of n such that the sum of the following series exceeds 2,000,000:

$$1 + 2 + 4 + 8 \dots$$