

Algebra II

11-5

Sums of Arithmetic and Geometric Series

Sum of a Finite Arithmetic Series :

$$S_n =$$

Find the sum of each arithmetic series.

$$1 + 2 + 3 + 4 + 5 + \dots + 99 + 100$$

Sum of a Finite Geometric Series :

$$S_n =$$

Find the sum of each geometric series.

$$2 + 4 + 8 + 16 + \dots + 1024$$

Find the sum of each arithmetic series.

1) $n = 20 ; a_1 = 5 ; a_{20} = 62$

Find the sum of each arithmetic series.

$$7) \sum_{j=1}^{50} 3j + 2$$

Find the sum of each geometric series.

$$17) \sum_{k=1}^{12} 2^{-k}$$

Find the sum of the following.

21) The first 20 positive integers ending in 3

Assignment: pg. 527 2-28 even
