## Advanced Math

## 9a-2

## Arithmetic Sequence -

Determine whether or not the sequence is arithmetic. (pg 726)
3) $1,2,4,8,16, \ldots$
9) $5.3,5.7,6.1,6.5,6.9, \ldots$
$n$th term of an Arithmetic Sequence:

Write the first five terms of the sequence. Determine whether the sequence is arithmetic, and if it is, find the common difference.
11) $a_{n}=5+3 n$
19) $a_{1}=15, a_{k+1}=a_{k}+4$

Write the first five terms of the arithmetic sequence.
31) $a_{8}=26, a_{12}=42$

Find a formula for $a_{n}$ for the arithmetic sequence.

$$
\text { 43) } a_{3}=94, a_{6}=85
$$

Sum of an arithmetic sequence:

Find the sum of the first $n$ terms of the arithmetic sequence.
55) $8,20,32,44, \ldots, n=10$

Evaluate.
65)

$$
\xi_{n}^{\xi_{n}}
$$

## Assignment:

pg. 726
2-24 every 4th,
26-44 even, 56-78 even, 82.

