## Formula Sheet

$$
\begin{aligned}
& a_{n}=a_{1}+(n-1) d \\
& a_{n}=a_{1} r^{n-1} \\
& \sum_{k=1}^{n} a_{k}=\frac{n}{2}\left(a_{1}+a_{n}\right)
\end{aligned}
$$

( $a_{k}$ is the explicit rule)
$\sum_{k=1}^{n} a_{k}=\frac{a_{1}\left(1-r^{n}\right)}{1-r}$
( $a_{k}$ is the explicit rule)
$\sum_{k=1}^{\infty} a_{k}=\frac{a_{1}}{1-r}$
( $a_{k}$ is the explicit rule)

