**5C Composite Volumes of Revolution**

1. Use mathematical induction to prove that:

$$\left[\begin{matrix}1&-1\\0&2\end{matrix}\right]^{n}=\left[\begin{matrix}1&1-2^{n}\\0&2^{n}\end{matrix}\right] for  n\in Z^{+}$$

1. Use mathematical induction to prove that:

$$\left[\begin{matrix}-2&9\\-1&4\end{matrix}\right]^{n}=\left[\begin{matrix}-3n+1&9n\\-n&3n+1\end{matrix}\right] for  n\in Z^{+}$$