A.5.4

a

$$\begin{aligned}
&\{n+1\}_{n=0}^{5} \\
\underset{u=n+2}{=} &\{(u-2)+1\}_{u=0+2}^{5+2} \\
= &\{u-1\}_{u=2}^{7} \\
= &\{n-1\}_{n=2}^{7}
\end{aligned}$$

c

$$\begin{aligned}
&\{2n\}_{n=0}^{10} \\
\underset{u=n+2}{=} &\{2(u-2)\}_{u=0+2}^{10+2} \\
= &\{2u-4\}_{u=2}^{12} \\
\neq &\{2u-2\}_{u=2}^{12}
\end{aligned}$$

d

$$\begin{aligned}
&\{(-1)^n n\}_{n=2}^{10} \\
\underset{u=n-2}{=} &\left\{(-1)^{u+2}(u+2)\right\}_{u=2-2}^{10-2} \\
= &\left\{(-1)^2(-1)^u(u+2)\right\}_{u=0}^{8} \\
\underset{(-1)^2=1}{=} &\{(-1)^u(u+2)\}_{u=0}^{8} \\
= &\{(-1)^n(n+2)\}_{n=0}^{8}
\end{aligned}$$