(Q5)

All odd numbers ≥ 3.

We are given that for a statement $P(k)$:

1. $P(3)$ is true.
2. For any $k > 1$, $P(k) \implies P(k+2)$ is true.

We can justify this using the principle of mathematical induction (PMI). Given a base case and an induction hypothesis, we can find all numbers n for which $P(n)$ is true.

By (1), since $P(3)$ is true but not $P(1)$ (by (2)), we can take $P(3)$ as our base case.

Statement 2 tells us that $P(k) \implies P(k+2)$. This means for any given $k \geq 3$, e.g. 3, $P(k) \implies P(k+2)$ (in this case $P(3) \implies P(5)$). By induction, we can continue this indefinitely for all odd natural numbers ($P(5) \implies P(7)$, $P(7) \implies P(9)$, etc.).

Thus, by PMI, we can conclude that $P(n)$ is true for all odd numbers $n \geq 3$.