Number Theory

In these questions you often need to think about odd and even numbers separately.

if $x \in N$ (the series of integers)

Then even numbers can be represented by

EVEN $x = 2n \quad n \in N$

and odd numbers

ODD $x = 2n + 1$ (or $2n - 1$ if you prefer)

Also where $>$ or $<$ signs are involved you can multiply both sides of an equation by a +ve number and the $>$ stays as $>$ (and $<$ stays $<$)

BUT if you multiply both sides by a -ve number then $>$ becomes $<$, and $<$ becomes $>$.