let's try another

even

odd

For all if then


PROVE IT

# let's try another

**Theorem**

For all integers $m$ and $n$, if $m$ and $n$ are odd, then $m+n$ is even.


- Find the **formal definitions** for any terms in the theorem:
  - an integer $n$ is called **even** if there is an integer $k$ where $n = 2k$
  - an integer $n$ is called **odd** if there is an integer $k$ where $n = 2k + 1$
- What is the grammatical structure of the theorem?
  - **For all** integers $m$ and $n$, **if** $m$ and $n$ are odd, **then** $m+n$ is even.

**Theorem**

For all integers $m$ and $n$, if $m$ and $n$ are odd, then $m+n$ is even.