1.1 Making Conjectures: INDUCTIVE REASONING

Conjecture: a testable expression that is based on available evidence but not yet proved.

"hypothesis (educated guess) in math"

Inductive reasoning: drawing a general conclusion by observing patterns and identifying properties in specific examples.

Ex. #1
Make a conjecture about the product of 2 odd integers

"trial and error"

\((+3)(+7) = +21\) \(\rightarrow\) odd integer can "-" or "+
\(\sqrt{\text{odd product}}\)

\((-5)(-3) = +15\) \(\rightarrow\) 2 "-" odd integers
\(\sqrt{\text{odd product}}\)

\((-3)(+3) = -9\) \(\rightarrow\) 1 "+" and 1 "-" odd integer
\(\sqrt{\text{odd product}}\)

my conjecture is that the product of 2 odd integers is an odd integer.
try other integers to test your conjecture

\((-211)(-17) = 3587 \checkmark \text{odd product again}\)