

2-1

Inductive Reasoning and Conjectures

Definitions

Conjecture - An educated guess based on known information.

Inductive Reasoning - Reasoning that uses a number of specific examples to arrive at a generalization or prediction.

Counterexample - A false example to prove a conjecture as untrue.

Example: *Determine if the Conjecture below is true or false. If false, state a counterexample*

Given: $AB + BC = AC$

Conjecture: B is the midpoint of AC

False! *Counterexamples will vary!*

One possible example could be....

B is NOT exactly in the middle

