H.Geometry – Chapter 2 – Definition Sheet

Section 2.2

Inductive Reasoning
- Process of....

1) observing data
2) recognize patterns
3) make generalizations from observations.

Conjecture
- Definition

- A generalization based on inductive reasoning. "hypothesis"

Looking for Patterns in number sequences

- Examine the differences (subtract) and ratios (divide) between terms
- Example:

5, 7, 10, 14, 17, 20 +3 -10, -17, -24, -31, -38 -7

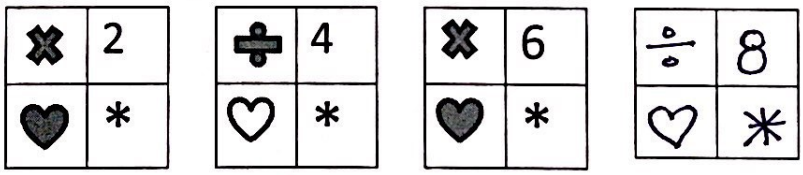
2, 4, 7, 11, 16, 22 +next # 1, 1, 2, 3, 5, 8, 13, 21, 34 adding previous #

Recursion (Recursive Rule)

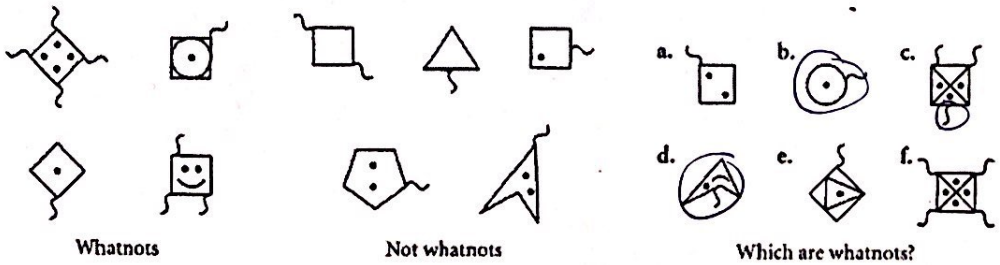
Applying a rule repeatedly to generate new terms

Picture Patterns

- To find the next picture, be sure to make careful observation of what is different in each picture.



Using Inductive Reasoning



* what not is a
  - square
  - squiggle out of corner
  - must have point

* A, E, F