2-1 Inductive Reasoning

Given any integer n then $2n - 1$ is an odd integer

n	$2n - 1$
1	1
2	3
3	5
4	7
5	9
…	…

True or False?   True

Inductive Reasoning is a process of reasoning in which a conclusion is drawn that a certain rule is true based on an observed pattern or false based on a counter example to a pattern

How many line segments are there between endpoints?

1

$$1 + 2 = 3$$

How many line segments are there between endpoints?

$$1 + 2 + 3 = 6$$

$$1 + 2 + 3 + 4 = 10$$

# of end points $= n$ # of segments $=$

$$(n-1)+(n-2)+...+1 = \sum_{k=1}^{n} k - 1$$