

1.1 Making Conjectures: Inductive Reasoning

Curricular Competencies:

I can explore, analyze and apply mathematical ideas

I can explain and justify math ideas and decisions

I can reflect on math thinking

Conjecture: _____

Inductive Reasoning: _____

Conjectures can be tested and those that appear to be valid allow us to _____

Ex: Study the following data about precipitation in Vancouver.

Precipitation in Vancouver (mm)												
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2003	150.5	27.1	133.7	139.8	49.3	12.8	19.8	4.1	40.2	248.2	167.4	113.2
2004	249.6	45.8	132.8	90.2	68.6	49.6	43.6	28.6	53.6	155.4	136.6	160.8
2005	283.6	57.0	92.4	70.0	42.8	54.4	25.2	4.8	39.4	57.8	350.8	146.0
2006	181.4	116.0	214.8	76.2	37.0	80.0	53.0	8.4	73.6	155.2	116.2	210.6
2007	137.6	68.6	75.2	62.2	43.2	43.0	15.8	75.8	30.6	99.6	177.0	197.2

Use inductive reasoning to make some conjectures about precipitation in Vancouver.

What mathematical calculations could you use to help support your conjecture? _____

Ex: Make a conjecture on the product of two odd integers.

_____ does not allow you to prove a conjecture to be _____.

Continuing a _____ is a common form of _____ reasoning.

Ex. 1, 3, 7, ...

Ex: Make a conjecture about the difference between consecutive perfect squares.

Ex: Study Example #4 on pages 10 and 11.

What conjecture did Marc make about the shape that is created by joining the midpoints of adjacent sides in any quadrilateral?

What mathematical processes did Marc use to support his conjecture?

What was Tracey's conjecture?

Whose conjecture is better? Explain.

Are they both correct? Explain.