

HW
pg 85-87
#10, 11, 14,
19-26, 33-35,
46, 47, 49

Geometry

Chapter 2
Section 2-1

Vocabulary

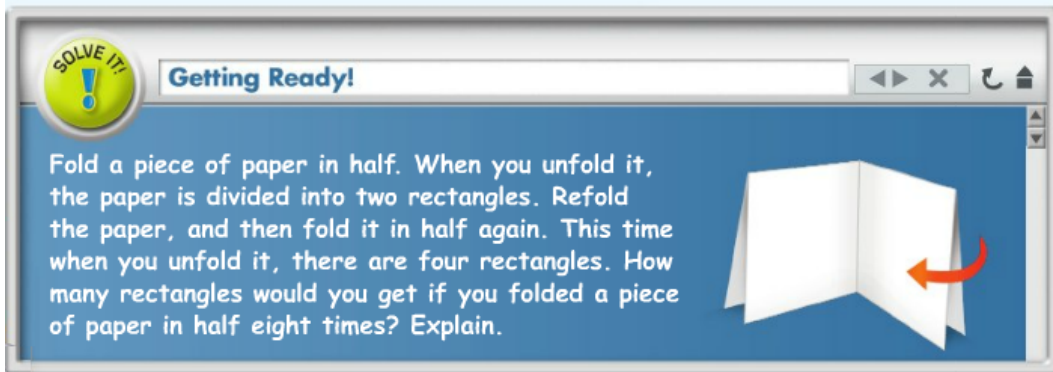
Inductive
Reasoning

Reasoning based on observed
patterns

Conjecture

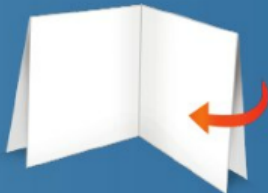
Conclusion reached based on
inductive reasoning

Finding a Pattern



SOLVE IT! **Getting Ready!**

Fold a piece of paper in half. When you unfold it, the paper is divided into two rectangles. Refold the paper, and then fold it in half again. This time when you unfold it, there are four rectangles. How many rectangles would you get if you folded a piece of paper in half eight times? Explain.



Pattern Examples

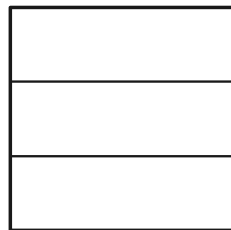
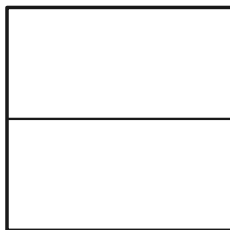
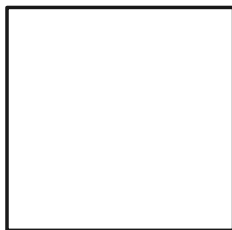
1,4,7,10,13,...

.01,.05,.10,.25,.50,1,2,...

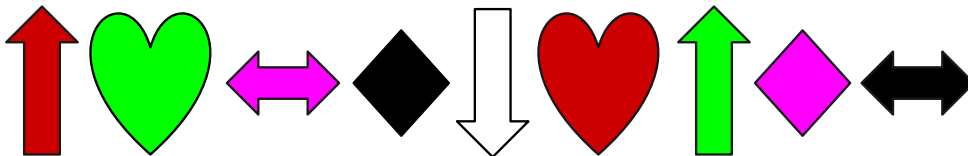
4,6,10,16,24,34,...

R,O,Y,G,B,...

Shape Examples



Conjecture



What shape is the 12th term?

What shape is the 22st term?

What color is the 25th term?

What color is the 18th term?

What is the shape and color of the 40th term?

Numerical Conjecture

What is the sum of the first four even numbers?

What is the sum of the first six even numbers?

Number of Terms	Sum
1	$2 = 2 = 1 \cdot 2$
2	$2 + 4 = 6 = 2 \cdot 3$
3	$2 + 4 + 6 = 12 = 3 \cdot 4$
4	$2 + 4 + 6 + 8 = 20 = 4 \cdot 5$

Homework

Page 85-87

#10, 11, 14, 19-26, 33-35, 46, 47, 49