Adapted

ALGEBRA II

Integer Exponents

Can you fold a piece of notebook paper in half 10 times?

How thick will the folded paper be?

Will the area of the paper on the top of the folded stack be larger or smaller than a postage stamp?

Challenge

- a. What are the dimensions of your paper?
- b. How thick is one sheet of paper? Explain how you decided on your answer.
- c. Describe how you folded the paper.

Adapted

Number of Folds	0	1	2	3	4	5	6	7	8	9	10
Thickness of the Stack											
(in.)											
the Top of the											
Stack (sq. in.)											

d. Record data in the following table based on the size and thickness of your paper.

- e. Were you able to fold a piece of notebook paper in half 10 times? Why or why not?
- f. Create a formula that approximates the height of the stack after *n* folds.