

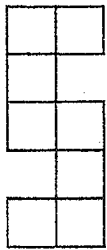
Name: Jessica Jensen
Grade: 6th

Teacher: Mrs. Park

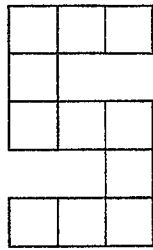
The Queen's Croquet-Ground #2

Utah's Largest Math Event (qualifier)

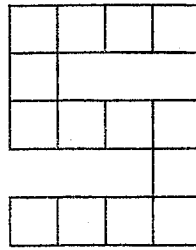
The shapes below show how the croquet-ground grows every time the Queen changes her mind. Now she wants the soldiers to build a new fence around each croquet-ground.



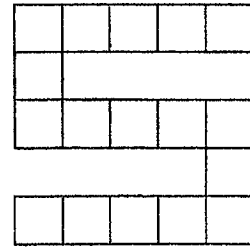
#1



#2

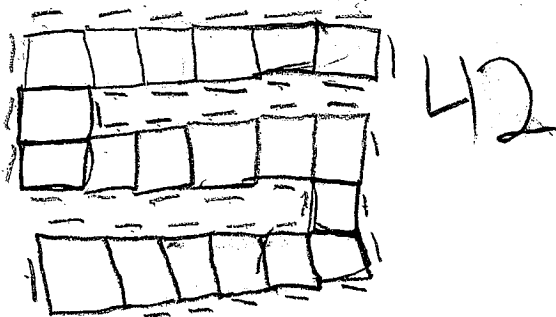


#3



#4

1. Use a pattern from the shapes above to determine the perimeter of the 5th shape in the sequence. Show or explain how you arrived at your answer. I counted the outside of the squares that is what the lines are for on the 5 shape



2. Write a formula that you could use to find the perimeter of any shape n .

Explain how you found your formula. $4n+12$ is the formula look on both

For example

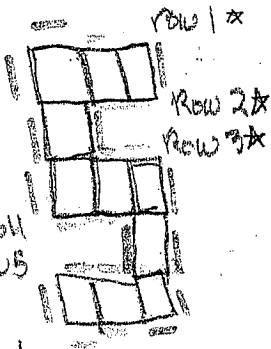
Changing Rows

* Row 1

* Row 1

* Row 5

* Row 6



The fencing perimeter in blue will never change, there will always be 12 sections will always stay the same. N is the Croquet ground number there are 6 rows that are going to change they are in green. So the formula is $N+12$