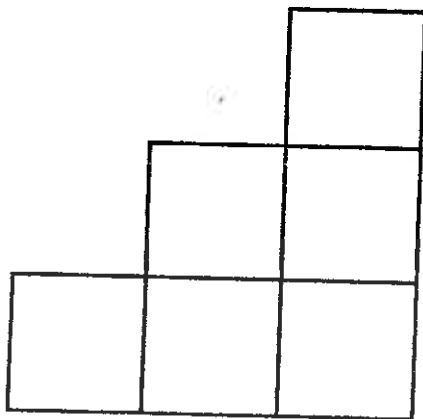# POW #15

A STAIRCASE PATTERN

Some 1 centimeter squares are arranged n a staircase pattern. The drawing below shows a 3 step staircase. The area is 6 square centimeters and the perimeter is 12 centimeters.

What is the area and perimeter of a 10 step staircase?

Note: Area refers to the number of squares inside the figure. Perimeter is the distance around the figure.

FIRST EXTENSION: What is the area and perimeter of a 20 step staircase?

SECOND EXTENSION: Describe the relationship between the number of steps and the perimeter and between the number of steps and the area.