Below is a student's, Nicole's, method for finding the total number of gray cobblestones. For the Size 3 and Size 9 cobblestone patterns, her arithmetic method is presented. On the side, her algebraic equation is presented.

Circle and label the Size 3 or the Size 9 drawing to show how you think Nicole is thinking about the gray stones.
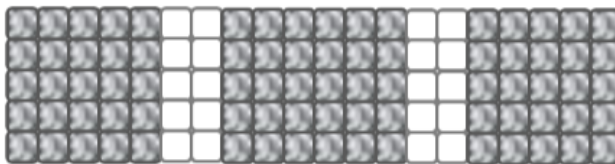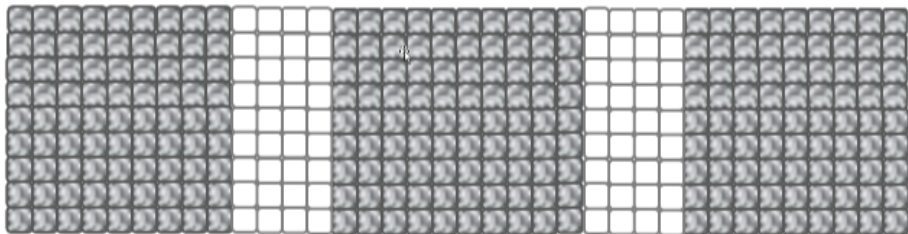
Size 3

$3^2 + 3 \cdot 4 + 3^2 = 30$

Nicole's equation:

$x^2 + x \cdot (x + 1) + x^2 = T$

Size 5

Size 9

$9^2 + 9 \cdot 10 + 9^2 = 252$

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