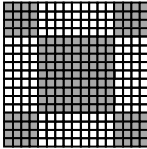


Sidewalk Patterns

Rubric

		Points	Section points																				
Draws correct pattern: 		1	1																				
1. Gives correct answers: <table border="1" data-bbox="672 661 1232 884" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pattern number, n</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>Number of white blocks</td> <td>12</td> <td>40</td> <td>84</td> <td>144</td> </tr> <tr> <td>Number of gray blocks</td> <td>13</td> <td>41</td> <td>85</td> <td>145</td> </tr> <tr> <td>Total number of blocks</td> <td>25</td> <td>81</td> <td>169</td> <td>289</td> </tr> </tbody> </table> <p><i>Partial credit: 5, 6 or 7 correct. Allow follow through in 'totals'.</i></p>		Pattern number, n	1	2	3	4	Number of white blocks	12	40	84	144	Number of gray blocks	13	41	85	145	Total number of blocks	25	81	169	289	2 (1)	2
Pattern number, n	1	2	3	4																			
Number of white blocks	12	40	84	144																			
Number of gray blocks	13	41	85	145																			
Total number of blocks	25	81	169	289																			
2. Gives a correct answer such as: There is one more gray than white blocks		1	1																				
3.a. Gives correct answers: 9² and 13² b. Gives correct answer: 21² or 441 c. Gives correct answer: (4n + 1)² or equivalent		1 1 2	4																				
4.a. Gives a correct answer such as: Subtract 1 from the total and divide by 2. b. Gives correct answer: 312 and Shows work such as: $(625 - 1) / 2$		1 1	2																				
Total Points			10																				