

Lesson #16 Answer Sheets

Sierpinski's Triangle

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1. See the center diagram above.

2. 40 are not part of the triangle
81 are part of the triangle

3.

Iteration #	Number of Small Triangles	Ratio of Outputs
0	1	
1	3	$3/1 = 3$
2	9	3
3	27	3
4	81	3

4. 3, 3, and 3. The values are placed in the chart above.

5. Yes.

6. Yes

7. 1

8. 3

9. Growth factor.

10. $1 \cdot 3^x$

11. 243 small triangles

12. Graphing activity.

13. Find the point where the horizontal line, $y = 243$, intercepts the graph.