Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table: \_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

**7.0 Expanding Squares HOMEWORK**

On graph paper (on the back), create squares with dimensions 1x1, 2x2, 3x3, … up to 12x12.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 1. Fill in the table and answer the questions below.

|  |  |
| --- | --- |
| Dimensions of | # of |
| Square | Tiles |
| 1 x 1 | 1 |
| 2 x 2 | 4 |
| 3 x 3 | 9 |
| 4 x 4 |   |
| 5 x 5 |   |
| 6 x 6 |   |
| 7 x 7 |   |
| 8 x 8 |   |
| 9 x 9 |   |
| 10 x 10 |   |
| 11 x 11 |   |
| 12 x 12 |   |

 | 1. Is there a pattern? What is the pattern?
 |

|  |
| --- |
| 1. Can you make a square with 84 tiles?

CLAIM (Yes or no)EVIDENCE (Show your work)REASONING (Explain your work) |
| 1. Can you make a square with 196 tiles?

CLAIM (Yes or no)EVIDENCE (Show your work)REASONING (Explain your work) |

Grid print out: <http://www.mpsaz.org/field/staff/jgramirez/math_a/files/1-4_inch_grid_paper.pdf>

<https://learnzillion.com/lesson_plans/467-identify-perfect-squares-and-perfect-cubes-by-building-and-observing-models?card=10104>

HW: 7.0 HW (handout)