CW

1. DRAW the square for 6 squared and the square for 9 squared:

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2. If you know that 122 = 144 (see the square below), how could you figure out 132?

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3. If you know that 122 = 144 (see the square below), how could you figure out 112?

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4. If you know that 652 = 4225 (see the square below), how could you figure out 662 ?

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5. Use a shortcut strategy to find all these squares, given 20 x 20 = 400: (make a square sketch for each if it helps!)

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| 20 x 20 = | 400 |
| 21 x 21 = |  |
| 22 x 22 = |  |
| 23 x 23 = |  |
| 24 x 24 = |  |

Color the first 4 triangular numbers here:

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6. When we combine 2 consecutive triangular numbers, we can build a square!



a) What square can you build with the triangular numbers 3 and 6? Draw the square below.

b) What square can you build with the triangular numbers 6 and 10? Draw the square below.

1. b)

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c) Can you put it in words?

* The 2nd and 3rd triangular numbers build what square? \_\_\_\_\_\_\_\_
* The 3rd and 4th triangular numbers build \_\_\_\_\_\_\_\_\_
* The 4th and 5thtriangular numbers build \_\_\_\_\_\_\_\_\_\_\_.

7. Challenge :

a) Can you find the 10th triangular number? \_\_\_\_\_\_\_\_\_\_

b) What is the sum of the 10th and 11th triangular numbers ? \_\_\_\_\_\_\_\_\_\_\_