# **Pre-Calculus 11 - Sequences and Series Review**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_

Block: \_\_\_\_\_\_\_\_\_\_

**Question 1 –** Going across and going down are different number sequences. Fill in the empty boxes so that each sequence has a pattern.

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**Question 2** – Complete the table below

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| First 5 Terms | arithmetic *(d* = ?)geometric (*r* = ?)neither | $$t\_{1}$$ | $$t\_{11}$$ | General Term $t\_{n}$ |
| -1, 4, 9, \_\_\_\_, \_\_\_\_ |  |  |  |  |
| $\frac{1}{3}, \frac{1}{6}, \frac{1}{12}$, \_\_\_\_, \_\_\_\_ |  |  |  |  |
|  | geometric $r=\frac{1}{5}$ | 15 |  |  |
| $1,\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$, \_\_\_\_ |  |  |  |  |
|  |  |  |  | $$t\_{n}=\frac{1}{3^{n-2}}$$ |
|  | arithmetic *d* = 1 | -5 | 5 |  |

**Question 3** - Fill in the empty boxes with positive numbers so that each row and column forms a geometric sequence. Each change of direction is a different sequence.



\*\*\* Solutions \*\*\*

Problems from Mathematics Teacher January 1989. Problem #2 is also on p45 #26 of textbook.





