

Name: _____

Geometric Sequences & Series - Maze Activity

Directions: ① Start at the top left problem. ② Look for the answer around the page. ③ Once you find the matching answer, record the design in your trail of answers below and solve that problem. ④ Continue until all are complete. Show all work and complete each problem.

≡ _____

≡ START:	Δ 1280
Find s_9 for the series with $a_1 = 6$ and $r = -2$	Find the sum $\sum_1^4 4\left(\frac{1}{2}\right)^{n-1}$
□ 9	⊙ 60,485.2
The sum of a geometric series is 2,351,454 The first term of the series is 42 and its common ratio is 6. How many terms are in the series?	Find the 12 th term of the sequence: 64, 16, 4, 1, ...
↓ 7.5	⊙ 48,549.13
How many terms are in the geometric series? $2.1 + 10.5 + \dots + 820,312.5$	How many terms in the geometric series? $20 + 60 + 180 + \dots + 1,180,980$

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Find S_{11} in the geometric series with a first term of 19 and a common ratio of 2.1 (Round to the nearest tenth)

Determine:

$$\sum_{n=1}^5 3(2)^{n-1}$$

⊙ -19,131,876

↙ 0.000015

In a video game, players earn 10 points for finishing the first level and twice as many points for each additional level. How many points does a player earn finishing the 8th level?

Brooklyn has graduated from Awesome University and has taken a job as an Olympic Volleyball coach. In the first year she makes \$41,500 but her contract says that her salary will increase by 4% each year. How much will she make in her 5th year on the job?



∑ 11

♣ 93

What do you call a skeleton that doesn't work?

Find a_{15} for the sequence:

-4, -12, -36, -108, ...