

9-5 Standardized Test Prep

Geometric Series

Gridded Response

Solve each exercise and enter your answer in the grid provided.

- What is the value of a_1 in the series $\sum_{n=0}^{20} 3\left(\frac{1}{2}\right)^n$?
- What is the sum of the geometric series $2 + 6 + 18 + \dots + 486$?
- A community organizes a phone tree in order to alert each family of emergencies. In the first stage, one person calls five families. In the second stage, each of the five families calls another five families, and so on. How many stages need to be reached before 600 families or more are called?
- What is the approximate whole number sum for the finite geometric series $\sum_{n=0}^5 8\left(\frac{1}{4}\right)^n$?
- What is the sum of the geometric series $1 + \frac{1}{3} + \frac{1}{9} + \dots$? Enter your answer as a fraction.

Answers

1.	2.	3.	4.	5.