

## Lesson 1.4: Geometric Series

Complete the *Practice* below. When you have completed all the questions for *Lesson 1.4 Practice – VIII* with your best work, mark your work by first comparing your answers to the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.



### **Practice – VIII**

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1. Determine if the following geometric series are convergent or divergent. Calculate the sum, where possible.

a.  $1 + 3 + 9 + \dots$

b.  $8 + 4 + 2 + \dots$

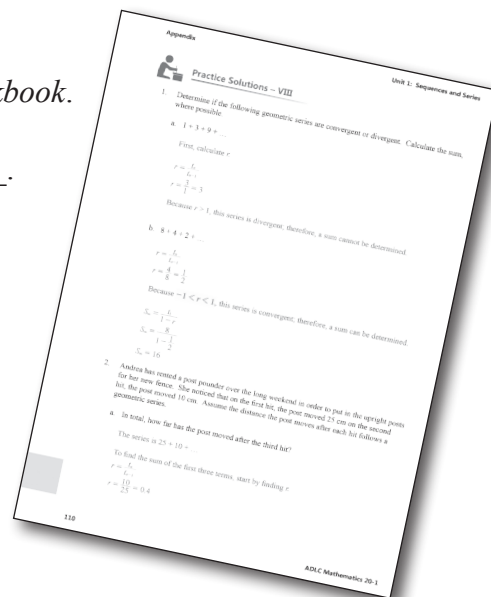
2. Andrea has rented a post pounder over the long weekend in order to put in the upright posts for her new fence. She noticed that on the first hit, the post moved 25 cm, and on the second hit, the post moved 10 cm. Assume the distance the post moves after each hit follows a geometric series.
  - a. In total, how far has the post moved after the third hit?
  - b. If given an infinite number of hits, how far down would the post have moved?

Mark your work for *Lesson 1.4 Practice – VIII* using the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.

Transfer your self-assessed mark to the front cover of the *Workbook*.

My self-assessed mark on *Lesson 1.4 Practice – VIII* is \_\_\_\_\_.

Reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.



Question Number	Got it!	Almost there...	Need to retry or ask for help.	Similar questions from <i>Pre-Calculus 11</i>
1				p. 63 #1, 2, 6, 17
2				p. 63 #8, 15, 16

You may proceed to *Explore Your Understanding Assignment* on the next page of this *Workbook*.

**Note:** Before you complete *Explore Your Understanding*, you may review your skills and get more practice by completing the following problems in *Pre-Calculus 11*.

- Page 53 #1, 2ab, 3bd, 4ac, 5a, 6, 8, 10, 13, and 22
- Page 63 #1, 2, 6, 8, 15, 16, and 17

Check your work in *Enhance Your Understanding*.

