Lesson 9.3 Practice: Geometric Sequences and Series

School Launch · Algebra II · Unit 9: Sequences and Series · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the sum of the first 5 terms of the geometric series $-2 + -6 + -18 + \cdots$ EASY

2. Find the sum of the first 10 terms of the geometric series $-3 + 6 + -12 + \cdots$ EASY

3. Find the sum of the first 7 terms of the geometric series $6 + 18 + 54 + \cdots$ EASY

4. Find the sum of the first 7 terms of the geometric series $4 + -8 + 16 + \cdots$ MEDIUM

5. Find the sum of the first 10 terms of the geometric series $2 + -4 + 8 + \cdots$ MEDIUM

6. Find the sum of the first 5 terms of the geometric series $5 + 10 + 20 + \cdots$ MEDIUM

7. Find the sum of the first 8 terms of the geometric series $-3 + -9 + -27 + \cdots$ MEDIUM

8. Find the sum of the first 10 terms of the geometric series $-4 + -12 + -36 + \cdots$ HARD

9. Find the sum of the first 7 terms of the geometric series $-5 + -15 + -45 + \cdots$ HARD

10. Find the sum of the first 10 terms of the geometric series $1 + 3 + 9 + \cdots$ HARD