Lesson 9.5 Practice: Savings, Loans and Geometric 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. Isaac deposits $180 at the end of every month into an account earning 4% compounded monthly. What is the balance after 9 years? (It is a geometric series.) EASY

2. Hannah deposits $330 at the end of every month into an account earning 6% compounded monthly. What is the balance after 9 years? (It is a geometric series.) EASY

3. Miriam deposits $260 at the end of every month into an account earning 5% compounded monthly. What is the balance after 17 years? (It is a geometric series.) EASY

4. Grace deposits $370 at the end of every month into an account earning 4% compounded monthly. What is the balance after 18 years? (It is a geometric series.) MEDIUM

5. Lydia deposits $270 at the end of every month into an account earning 4% compounded monthly. What is the balance after 10 years? (It is a geometric series.) MEDIUM

6. Henry deposits $100 at the end of every month into an account earning 3% compounded monthly. What is the balance after 8 years? (It is a geometric series.) MEDIUM

7. Esther deposits $500 at the end of every month into an account earning 3% compounded monthly. What is the balance after 15 years? (It is a geometric series.) MEDIUM

8. Peter deposits $420 at the end of every month into an account earning 6% compounded monthly. What is the balance after 18 years? (It is a geometric series.) HARD

9. Lydia deposits $420 at the end of every month into an account earning 3% compounded monthly. What is the balance after 30 years? (It is a geometric series.) HARD

10. Thomas deposits $70 at the end of every month into an account earning 5% compounded monthly. What is the balance after 18 years? (It is a geometric series.) HARD