### Lesson 26 Practice Problems

1. Kiran plans to save $200 per year. Bank A would pay 6% interest, and Bank B would pay 4% interest (both compounded annually). How many years will it take to save $10,000 if he uses Bank A? Bank B?
2. Find the sum of the first 20 terms of each sequence:
3. Diego wonders how much money he could save over 25 years if he puts $150 a year into an account with 4% interest per year compounded annually. He calculates the following, but thinks he must have something wrong, since he ended up with a very small amount of money:

* What did Diego forget in his calculation? How much should his total amount be? Explain or show your reasoning.

1. Which one of these equations is equivalent to  for ?

* (From Unit 2, Lesson 23.)

1. Is an identity? Explain or show your reasoning.

* (From Unit 2, Lesson 24.)

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* (From Unit 2, Lesson 24.)

1. The formula for the sum of the first terms in a geometric sequence is given by , where is the initial value and is the common ratio.

* A medicine is prescribed for a patient to take 700 mg every 12 hours for 5 days. After 12 hours, 4% of the medicine is still in the body. How much of the medicine is in the body after the last dose?
* (From Unit 2, Lesson 25.)



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