Ch. 6 to 7.3 Review 2

1. Determine the number of terms in the geometric sequence:

2. A new well produces 48000 L of water in the first month. If the volume of water pumped decreases by 6% each month, determine the total volume of water, in litres, that will be pumped from the well before it runs dry.

3. In a geometric series, if the sum of the first 12 terms is 20475 and the common ratio is 2, determine the value of the first term.

4. Evaluate: a) b)

5. Laura invests in a bond which pays interest at the rate of 2.5% per year compounded weekly. After 10 years the value of the bond has increased to $1267.28. What was the original value of the bond?

6. Mr. H worked for SD41 for 5 years. His annual salary was $38000 during his first year. Each year his salary increased by 2% over the previous year’s salary. Suppose he was able to keep half of his salary for a house he would like to purchase that requires a down payment of $100,000. Can he afford it?

7. Simplify:

8. Solve: a) b)

9. Graph

3. 511.75

4. a) 12264 b) 0.5

7.

8. a)x=-1 b)