Math 4 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1-8 Practice** Date\_\_\_\_\_\_\_\_

1. A new graduate accepts a job as a data processing clerk at a starting salary of $18,500 per year, with an annual increase of $750. Suppose he stays in the job for ten years. How much will he earn in total after 10 years?



2. Find  using one of the arithmetic series formulas.



3. Evaluate the following sums:

a.  b. 

4. You borrowed $6000 and agreed to pay it back over 5 years. Your **monthly** payments were

$145, $144.25, $143.50, $142.75,….,$100.75

a. How much did you pay over the life of the loan?



b. How much money in interest did she pay on this loan? That is, how much over $6000 did she have to pay back?

5. Find the sum of the following series: 

6. Find the partial sum of the following series: 

7. Because of air resistance, the length of each swing of a certain pendulum is 85% of the length of the previous swing. If the first swing has a length of 40 cm, find the total length the pendulum will swing before coming to rest.

**Find the sum of the following series (if it exists. . .)**

8. 

9. 15 + 10 +  + 

10.  + …

11. 