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## Unit 11.1 Remediation

Date: $\qquad$ Block: $\qquad$
Solve the following problems. Show all work for full credit.

1. Given the arithmetic sequence $2,5,8,11, \ldots$ what is the explicit formula?
2. What is a $a_{16}$ for the following sequence: $-2,2,6,10, \ldots$
3. Which of the following is the recursive formula for the following sequence: $8,-4,-16,-28, \ldots$
4. What is the Explicit (closed) formula for a sequence that has $a_{6}=1$ and $a_{7}=.25$
5. What is the fifth term of the sequence whose first term is $a_{1}=10$ and the recursive formula is $a_{n}=2\left(a_{n-1}\right)$ ?
6. What is the rate used to find the nth term of the sequence $8,6,4.5,3.375 \ldots$
7. The explicit (closed) formula for the sequence $2,-6,18,-54, \ldots$ is described by the rule:
8. This is a two-part question. Use the following to answer each part.
"Given the first two terms in the sequence are $\mathbf{2 0 0}$ and 210. Determine the following:"
a. If the above sequence were arithmetic what would the next number be? Place answer in box above.
b. If the above sequence were geometric what would the next number be? Place answer in box above.
