Converting Explicit to Recursive

Directions: Convert each explicit formula to a recursive formula. Include the first term. Show all work.

1. Convert the explicit formula to a recursive formula: $a_n = 9(2)^{n-1}$.

2. Convert the explicit formula to a recursive formula: $a_n = 4(3)^{n-1}$.

3. Convert the explicit formula to a recursive formula: $a_n = 160\left(\frac{1}{2}\right)^{n-1}$.

4. Convert the explicit formula to a recursive formula: $a_n = 729\left(\frac{1}{3}\right)^{n-1}$.

5. Convert the explicit formula to a recursive formula: $a_n = 7(-2)^{n-1}$.

6. Convert the explicit formula to a recursive formula: $a_n = 96\left(\frac{-1}{2}\right)^{n-1}$.

7. Convert the explicit formula to a recursive formula: $a_n = 3(5)^{n-1}$.

8. Convert the explicit formula to a recursive formula: $a_n = 800\left(\frac{1}{10}\right)^{n-1}$.

9. Convert the explicit formula to a recursive formula: $a_n = 18\left(\frac{2}{3}\right)^{n-1}$.

10. Convert the explicit formula to a recursive formula: $a_n = 10\left(\frac{3}{2}\right)^{n-1}$.

11. Convert the explicit formula to a recursive formula: $a_n = -6(4)^{n-1}$.

12. Convert the explicit formula to a recursive formula: $a_n = 21\left(\frac{-1}{3}\right)^{n-1}$.