Advanced Algebra

Arithmetic Sequences

Assignment #2

Remember: The nth term of an arithmetic sequence with first term U_1 and common difference d is given by the formula $U_n= U_1 + (n-1)d$

Solve the following. Assume each sequence is an arithmetic sequence.

1) Find the 19th term in the sequence for which $U_1=11$ and d=-2

2) Find the 16th term in the sequence for which $u_1=1.5$ and d=.5

3) Find n for the sequence for which $u_n=37$ $u_1= -13$ and d = 5

4) Find n for the sequence for which $u_n= 633$ $u_1`=9$ and d = 24

5) Find the first term in the sequence for which d=-2 and $U_7 = 3$

6) Find the first term in the sequence for which d $= \frac{2}{3}$ and $u_8 = 15$

7) Find d for the sequence for which $U_1 =4$ and $u_{11} = 64$

8) Find d for the sequence for which $U_{1=} -6$ and $u_{29} = 20$

9) Find the 43rd term in the sequence -19,-15,-11,…

10) Find the 58th term in the sequence 10,4,-2,…