

I. State the common difference and find the next four terms if the given sequence is arithmetic. You MUST show work to receive credit!!

1.) 7 , 11 , 15 , 19 , ...	2.) 3 , 6 , 9 , 13 , ...	3.) 31 , 23 , 15 , 7 , ...	4.) 4, 1.7, -0.6, -2.9, ...
arithmetic? YES NO	arithmetic? YES NO	arithmetic? YES NO	arithmetic? YES NO
common diff: _____	common diff: _____	common diff: _____	common diff: _____
Next four terms →	Next four terms →	Next four terms →	Next four terms →

II. Find the indicated term of each arithmetic sequence. Must SHOW WORK for CREDIT!!

5.) $a_1 = 2$ and $d = 6$; find the 12 th term	6.) $a_1 = -10$ and $d = 2$; find the 28 th term	7.) $a_1 = 23$ and $d = -14$; find the 33 rd term	8.) $a_1 = -24$ and $d = -5$; find the 19 th term
9.) Find a_{31} for sequence 34 , 38 , 42 , ...	10.) Find a_{52} for sequence 27 , 30 , 33 , ...	11.) Find a_{65} for sequence 12 , 5 , -2 , ...	12.) Find a_{23} for sequence 4 , 16 , 28 , ...

III. Considering all given sequences are arithmetic – Find what is asked. SHOW WORK!!!

13.) The 46 th term of the sequence is 203 and the common difference is 4. What is the first term?	14.) What is the common difference for the sequence where the first term is 36 and the 52 nd term is 597?	15.) Which term of the sequence - 15 , - 3 , 9 , ... is 417?
16.) The 18 th term of the sequence is - 105 and the common difference is - 7. What is the sixth term?	17.) What is the eleventh term of the sequence where $a_1 = 5$ and $a_{31} = 245$?	18.) Is - 50 a part of the following sequence: 17 , 14 , 11 , ... ? Explain your answer.

IV. Write the nth term formula (equation) for each arithmetic sequence. SHOW WORK!!!

19.) 4 , 9 , 14 , 19 , ...	20.) - 63 , - 46 , - 29 , - 12 , ...	21.) 7 , - 4 , - 15 , - 26 , ...
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V. Find the arithmetic means in each sequence. SHOW WORK!!!

22.) 6 , _____ , _____ , _____ , 38	23.) 63 , _____ , _____ , _____ , 147	24.) 16 , _____ , _____ , _____ , - 8
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