

Advanced Challenge Level 1 Problem #5

This problem involves seven sequences of numbers. For each sequence, you are given the first few terms. You are to (a) write the next three terms, (b) figure out what the 20th term of the sequence is, and (c) write a brief description of the pattern you used to find your answers.

1. 1, 5, 9, 13, _____, _____, _____, ...the 20th term is _____.

2. 1, .5, .333..., .25, .2, _____, _____, _____, ... the 20th term is _____.

3. 2, -4, 6, -8, _____, _____, _____, ... the 20th term is _____.

4. 10, 9.9, 9.6, 9.1, 8.4, _____, _____, _____, ... the 20th term is _____.

5. 1, 8, 27, 64, 125, _____, _____, _____, ... the 20th term is _____.

6. 2, 5, 6, 9, 10, 13, 14, 17, _____, _____, _____, ... the 20th term is _____.

7. 0, 1/2, 2/3, 3/4, 4/5, _____, _____, _____, ... the 20th term is _____.
