

1.(1 pt) Write down the first five terms of the sequence $\left\{ \frac{2n}{n+11} \right\}$, _____, _____, _____, _____, _____,

2.(1 pt) Find the 12th term of the arithmetic sequence $-6, -11, -16, \dots$
 Answer: _____

3.(1 pt) Find the sum $-6 - 3 + 0 + \dots + (-9 + 3n)$
 Answer: _____

4.(1 pt) Find the sum $3 + 1 - 1 + \dots - 15$
 Answer: _____

5.(1 pt) Find the common difference and write out the first four terms of the arithmetic sequence $\left\{ \frac{1}{2}n - \frac{4}{5} \right\}$

Common difference is _____
 $a_1 = \underline{\hspace{1cm}}$, $a_2 = \underline{\hspace{1cm}}$, $a_3 = \underline{\hspace{1cm}}$, $a_4 = \underline{\hspace{1cm}}$,

6.(1 pt) Find the nth term of the arithmetic sequence whose initial term is 1 and common difference is 4.
 _____ (Your answer must be a function of n .)

7.(1 pt) Find the first term and the common difference of the arithmetic sequence whose 9th term is 37 and 12th term is 49.
 First term is _____,

Common difference is _____
 8.(1 pt) Find x such that $-8x + 1$, $5x + 1$, and $10x - 79$ are consecutive terms of an arithmetic sequence.
 $x = \underline{\hspace{1cm}}$

9.(1 pt) Write down the first five terms of the following recursively defined sequence.
 $a_1 = 4; a_{n+1} = -2a_n - 5$
 _____, _____, _____, _____, _____