

1. For the arithmetic sequence -1.5, -0.7, 0.1, 0.9,...find the common difference.

d=

2. There is an arithmetic sequence whose first term is 1 and the common difference is -2. What are the first two terms of the arithmetic sequence?

1st term\_\_\_\_\_ 2nd term\_\_\_\_\_

3. Is 4.1, 7.2, 10.3, 13.4 an arithmetic sequence? Yes or No

4. There is an arithmetic sequence whose first term is 3 and the common difference is 9. What is the equation for this sequence? Equation: \_\_\_\_\_

Is the 4th term 31? Yes or No

Show your work.

5. The 45th term of an arithmetic sequence having  $b=3$  and  $d=8$  is:

a. 363      b. 364      c. 365      d. 366

Show your work below to prove it.

What is the equation for the sequence above? \_\_\_\_\_

6. Match the following arithmetic sequences with their common differences:

a) 3, 14, 25, 36	1) -11
b) 45, 68, 91, 113	2) -2
c) 68, 57, 46, 35	3) 11
d) 1, -1, -3, -5	4) not an arithmetic sequence

7. What is the equation for the arithmetic sequence of 343, 336, 329, ...? Equation: \_\_\_\_\_

Is 0 a term of this sequence? Yes or No

Show your work below to prove it.