

# Sequence

Name \_\_\_\_\_

Class: \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1a

---

1b

---

2a

---

2b

---

3a

---

3b

---

4a

---

4b

---

5a

---

5b

---

1. a) First term of an arithmetic sequence is 36, and the common difference is 12. If the sum of all terms is 60, then find the number of terms.

b) If the 4<sup>th</sup> term of an arithmetic sequence is 3, and the 6<sup>th</sup> term is 1.2, then find the sum of first 12 terms.

2. a) If 3<sup>rd</sup> term of an arithmetic sequence is 5, and if 5<sup>th</sup> term is 2,4, the find the sum of first 15 terms.

b) If first term of an arithmetic sequence is  $-2\frac{1}{2}$ , and if the common difference is  $\frac{3}{4}$ , then find the sum of first 10 terms.

3. a) A geometric sequence with terms 2, 6,.....,  $a_n$  is given. Which term of this sequence is equal to 486?

b) If the first term of a geometric sequence is 3, and common ratio is 2, and if the last term is 96, find the sum of all terms.

4. a) 4,8,16....is a geometric sequence. Find the sum of first 10 terms.

b) 5,15,45.... is a geometric sequence. Find the sum of first 7 terms.

5. a)  $(b_n)$  is a geometric sequence. If  $b_1 = 5$ ,  $q = -\frac{1}{5}$  and  $n = 5$ ,  $b_n = ?$ ,  
 $S_n = ?$

b)  $(b_n)$  is a geometric sequence. If  $b_1 = 3$ ,  $q = \frac{1}{3}$ , and  $n = 6$ ,  $b_n = ?$ ,  
 $S_n = ?$

