

**WORKSHEET: ARITHMETIC AND GEOMETRIC PROGRESSION****FOR SENIOR SECONDARY SCHOOL**

1. Find the 6th and 15th terms of the A.P whose first term is 6 and common difference is 7.

6th term:

15th term :

2. The 12th term of an A.P is -41. Given that the first term is 3, find the 20th term. :

3. If 8, A, B, C, D, 38, 44, 50..... is an AP, find the values of A, B, C, and D

A =

B=

C=

D=

4. The 3rd term of an A.P. is 9 while the 11<sup>th</sup> term is -7, write the first five terms of the AP.

5. The first term of an A.P. is 11 while the last term is 144, if the common difference is 7, find the number of terms it has.

Number of term =

6. Find how many terms has an A.P. whose Common difference and first term are respectively -6 and 8 and the last term is -82.

Number of term =

7. Find the 8th and 10th terms of a G.P. whose first term and common ratio are 6 and 2 respectively.

8<sup>th</sup> term =

10<sup>th</sup> term =

8. The 6th term of a G.P. is 1215. Given that the common ratio is 3, find the 9th term.

9. Given that 4, 12, x, y, 324, 972... is a geometric sequence, find the sum of x and y.      X =      Y =

10. A geometric progression has the second term as 9 and the fourth term as 81. Find the sum of the first four terms.

$S_4 =$

11. If 3, A, B, 192 are consecutive terms of a GP. Find the values of A and B      A =      B =

12. The sum of the first two terms of a G.P. is 28 but the sum of the third and fourth terms is 252. Find the second term of the G.P. if the seventh term is 5103.