



PRACTICE WORKSHEET

Subject: Mathematics

Class: ICSE 10th

Chapter: Arithmetic & Geometric Progressions

Worksheet: M-1

TYPE/TOPIC OF QUESTIONS: ARITHMETIC PROGRESSIONS – NTH TERM & SUM OF N TERMS

1. Show that the sequence 7, 11, 15, 19, 23, is an Arithmetic Progression. Find its 27th term and the general term.
2. The 5th term of an Arithmetic Progression is 16 and 13th term of an Arithmetic Progression is 28. Find the first term and common difference of the Arithmetic Progression.
3. Find the sum of the first 35 terms of an Arithmetic Progression whose third term is 7 and seventh term is two more than thrice of its third term.
4. If the 5th term and 12th term of an Arithmetic Progression are 30 and 65 respectively, find the sum of its 26 terms.

TYPE/TOPIC OF QUESTIONS: ARITHMETIC PROGRESSIONS – ODD NUMBER OF TERMS

5. The sum of three numbers in Arithmetic Progression is 12 and the sum of their square is 56. Find the numbers.
6. The sum of three numbers in Arithmetic Progression is -3 and their product is 8. Find the numbers.

TYPE/TOPIC OF QUESTIONS: GEOMETRIC PROGRESSIONS – NTH TERM & SUM OF N TERMS

7. Find the common ratio of the Geometric Progression whose, sum of the third and fifth terms is 90 and its first term is 1.
8. Find a Geometric Progression for which the sum of first two terms is -4 and the fifth term is 4 times the third term.
9. Find the sum of the geometric series:
 $4 - 12 + 36 - 108 + \dots$ to 10 terms
10. Find the sum of 12 terms of the Geometric Progression
 $3, 12, 48, 192, 768, \dots$
11. Which term of the Geometric Progression:
 $7, 21, 63, 189, 567, \dots$ is 5103?

TYPE/TOPIC OF QUESTIONS: GEOMETRIC PROGRESSIONS – ODD NUMBER OF TERMS

12. Sum and product of three numbers of a geometric progression are 38 and 1728 respectively. Find the numbers.
13. Find three numbers in Geometric Progression whose sum is 35 and product is 1000.