Worksheet: Sequences and Series

ICSE · Class 11 · Mathematics · 10 questions · 33 marks

Name: _____ Date: _____ Score: _____ / 33

Q1. Write the first three terms of the sequence whose nth term is an = 3n - 1. *[2 marks]*

Q2. Find the 6th term of the G.P. 2, 6, 18, ... *[2 marks]*

Q3. Find the geometric mean of 4 and 25. *[2 marks]*

Q4. In a G.P., the 3rd term is 18 and the 6th term is 486. Find the common ratio and the first term. *[3 marks]*

Q5. Find the sum of the first 8 terms of the G.P. 1, 2, 4, 8, ... *[4 marks]*

Q6. Find the sum of the first 6 terms of the G.P. 3, -6, 12, -24, ... *[4 marks]*

Q7. Insert three geometric means between 2 and 32. *[4 marks]*

Q8. Find the A.M. and G.M. of 9 and 16, and verify that A.M. >= G.M. *[4 marks]*

Q9. Find the sum to infinity of the G.P. 4, 2, 1, 1/2, ... *[4 marks]*

Q10. Express the recurring decimal 0.272727... as a fraction in lowest terms. *[4 marks]*