

## Worksheet: Sequences and Series

Uttar Pradesh State Board · Class 11 · Mathematics · 3 questions · 12 marks

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 12

**Q1.** Find the 20th term and sum of first 20 terms of the AP: 3, 7, 11, 15, ... [2 marks]

---

---

---

**Q2.** The sum of infinite terms of a GP is 12 and its first term is 4. Find the common ratio and the 4th term. [4 marks]

---

---

---

**Q3.** If  $a, b, c$  are in AP and  $a, b, c$  are all positive, prove that  $a + c \geq 2b$ , i.e., AM  $\geq$  GM gives the same inequality. [6 marks]

---

---

---