

Sequence and Series - Class XI

Related Questions with Solutions

Questions

Question: 01

First term of an A.P. of non-constant terms is 3 and its second, tenth and thirty-fourth terms form a G.P., find the common difference.

Solutions

Solution: 01

$$T_2 = 3 + d, T_{10} = 3 + 9d, T_{34} = 3 + 33d$$

Since T_2, T_{10}, T_{34} are in G.P., $T_{10}^2 = T_2 T_{34}$
 $\Rightarrow (3 + 9d)^2 = (3 + d)(3 + 33d) \Rightarrow d = 0, 1$. Hence $d = 1$

Correct Options

Answer:01

Correct Answer: 1