

# Arithmetic Progression

## Important Questions

- Qn 1) If  $a$  times the  $a$ th term of an AP is equal to  $b$  times the  $b$ th term. Find  $(a+b)$ th term. (Ans 0)
- Qn 2) What will be maximum sum of  $44, 42, 40, \dots$ ? (Ans 506)
- Qn 3) If the  $m$ th term of an AP is  $\frac{1}{n}$  and  $n$ th term is  $\frac{1}{m}$  then find the sum of  $mn$  terms. (Ans  $(mn+1)/2$ )
- Qn 4) How many terms of an AP must be taken for their sum to be equal to 120 if its third term is 9 and the difference between 7th and 2nd term is 20? (Ans 312)

Q5) Four numbers are inserted between the numbers 4 and 39 such that an AP results. Find the biggest of these four numbers.  
(Ans -

Q6) The sum of all terms of an AP having ten terms except for first term is 99 and except for 6<sup>th</sup> term 89. Find the third term of the progression if the sum of the first and fifth term is equal to 10.