

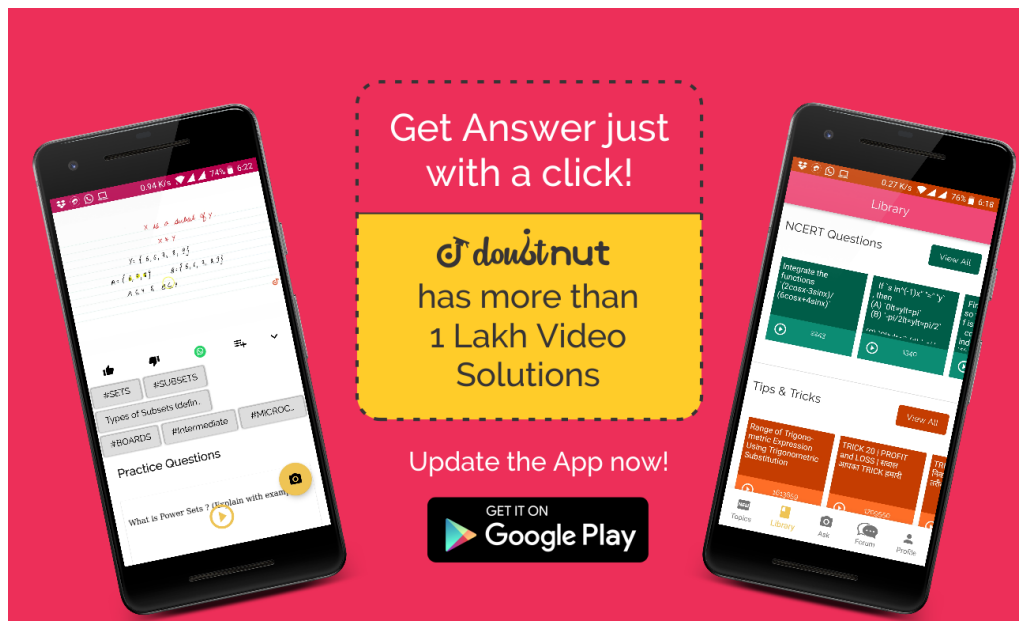
# CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS



## Chapter 5. ARITHMETIC PROGRESSIONS

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Ques No.	Question
1 - 205083	<p>CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS</p> <p>Find the sum of first 25 terms of an A.P. whose nth term is <math>1 - 4n</math></p> <p><a href="#">Click to watch Free Video Solution of this question on Doubtnut</a></p>
2 - 205104	<p>CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS</p> <p>Which term of the <math>AP: 3, 15, 27, 39, \dots</math> will be 132 more than its <math>54^{th}</math> term?</p> <p><a href="#">Click to watch Free Video Solution of this question on Doubtnut</a></p>
3 - 205274	<p>CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS</p> <p>First the term of an A.P is p and its common difference is q. Find its <math>10^{th}</math> term</p> <p><a href="#">Click to watch Free Video Solution of this question on Doubtnut</a></p>



**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

4 - 205397

For what value of  $n$  and the  $n^{th}$  terms of the following two A.Ps the same? 1, 7, 13, 19, (ii) 69, 68, 67,

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5 - 205410

In  $A. P.$ , the first term is 8,  $n^{th}$  term is 33 and sum to first  $n$  terms is 123. Find  $n$  and  $d$ , the common difference.

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6 - 205564

**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

If a, b and c are three consecutive coefficients terms in the expansion of  $(1 + x)^n$ , then find n.

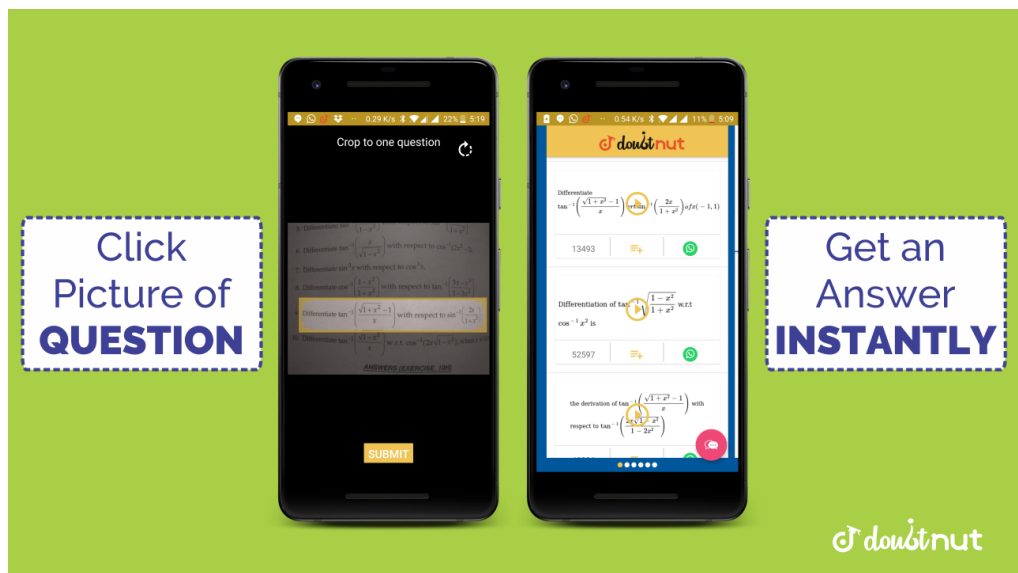
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7 - 205584

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Which term of the A. P. 3, 15, 27, 39, ... will be 120 more than its 21<sup>st</sup> term?

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8 - 205629

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

The sum of first six terms of an arithmetic progression is 42. The ratio of its 10th term to its 30th term is 1:3. Calculate the first and the thirteenth term of the A.P.

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9 - 205631

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

If the sum of first  $p$  terms of an AP is  $ap^2 + bp$  find the common difference

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10 - 205683

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

In an A.P., the first term is 2, the last term is 29 and sum of the terms is 155. Find the common difference of the A.P.

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11 - 205710

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

In an AP, the sum of first ten terms is -150 and the sum of its next ten terms is -550 Find the AP

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If the common difference of an A.P. is 3, then

$a_{20} - a_{15}$  is

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**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

Find how many two-digit numbers are divisible by 6.

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14 - 205888

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

Find an A.P. whose fourth term is 9 and the sum of its sixth term and thirteenth term is 40.

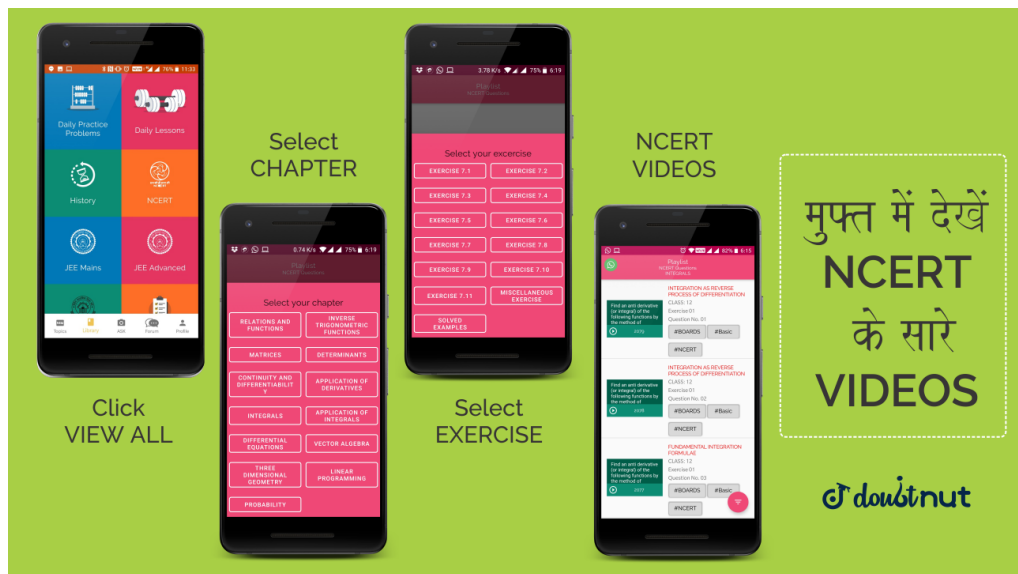
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15 - 205913

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The first and the last terms of an AP are 17 and 350 respectively. If the common difference is 9, how many terms are there and what is then sum?

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16 - 207320

If the  $n^{th}$  term of an A.P., is  $(2n + 1)$ , then the sum of its first three terms is  $6n+3$  (b) 15 (c) 12 (d) 21

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17 - 207372

How many two–digit numbers are divisible by 3?

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18 - 207463

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

Find the common difference of an A.P. whose first term is 5 and the sum of its first four terms is half the sum of the next four terms.

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19 - 205724

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

How many two-digit numbers are divisible by 3?

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20 - 205745

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS



Find the sum of all multiples of 7 lying between 500 and 900.

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CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

21 - 205775

Find the common difference of an A.P. whose first term is 5 and the sum of its first four terms is half the sum of the next four terms.

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22 - 205256

The common difference of the AP

$$\frac{1}{p}, \frac{1-p}{p}, \frac{1-2p}{p} \dots \dots \dots \text{is}$$

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23 - 205361

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

Find the sum of all three digit natural numbers, which are divisible by 7.



**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

Find the number of terms of the AP

$18, \frac{31}{2}, 13, \dots, -\frac{99}{2}$  and find the sum of all its terms.

**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

If the sum of first 7 terms of an AP is 49 and that of 17 terms is 289, find the sum of first  $n$  terms.

The 14th term of an A.P. is twice its 8th term. If its 6th term is -8, then find the sum of its first 20 terms.

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27 - 204834

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

Find the 60th term of the AP 8, 10, 12, ....., if it has a total of 60 terms and hence find the sum of its last 10 terms.

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28 - 203650

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For what value of  $k$  will

$k + 9$ ,  $2k - 1$  and  $2k + 7$  are the consecutive terms of an  $A.P.$

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29 - 203672

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

The fourth term of an A.P is zero. Prove that the 25th term is triple its 11th term

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30 - 203590

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

In an A.P. first term is 5, last term is 45 and sum = 400 . Find the no. of terms and common difference of A.P.

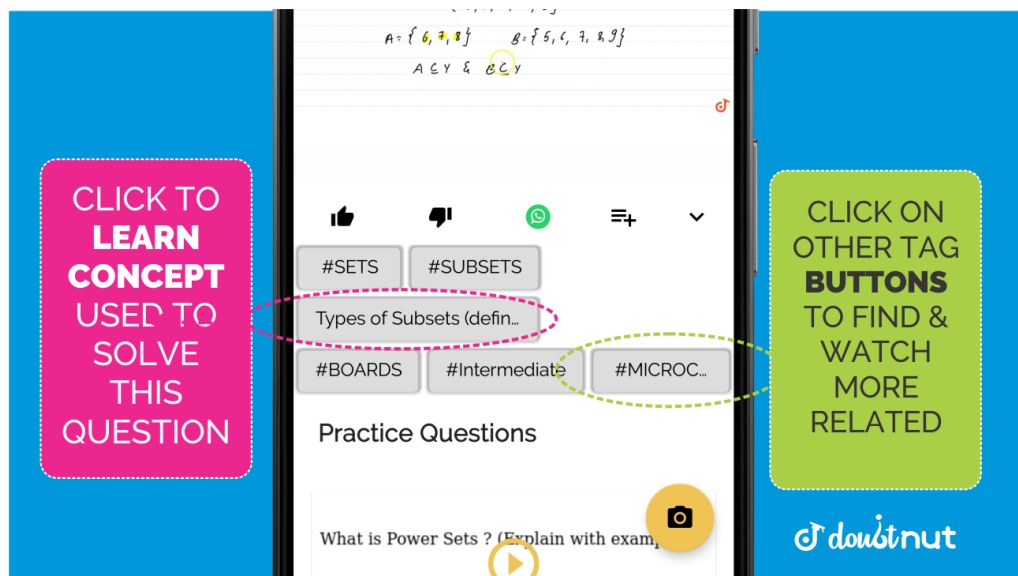
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31 - 215932

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

In an A.P. first term is 5, last term is 45 and sum = 400 . Find the no. of terms and common difference of A.P.

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32 - 203686

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

If the ratio of the sum of first  $n$  terms of two AP's is  $(7n + 1) : (4n + 27)$ , then find the ratio of their  $m^{th}$  terms.

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33 - 203498

CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS

What is the common difference of an A.P. in which  $a_{21} - a_7 = 84$

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Which term of the sequence

34 - 203566

$20, 19\frac{1}{4}, 18\frac{1}{2}, 17\frac{3}{4}, \dots$  is the first negative term?

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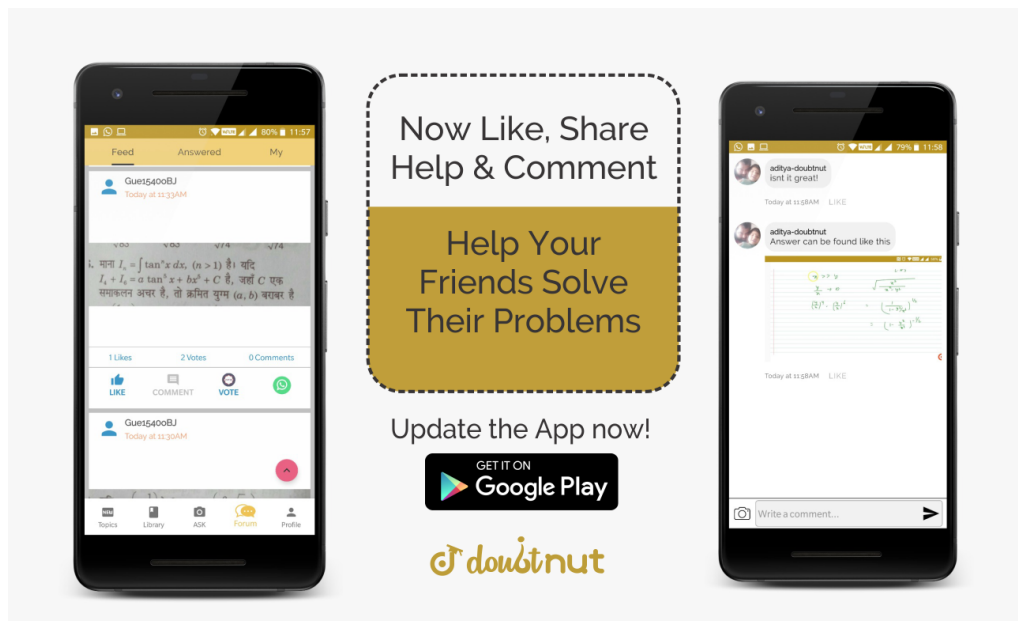
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If the ratio of the sum of first  $n$  terms of two

35 - 203615

A.P.'s is  $(7n + 1) : (4n + 27)$ , then find the ratio of their  $m$ th terms.

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**CLASS 10 BOARDS: MOST IMPORTANT QUESTIONS - Chapter 5. ARITHMETIC PROGRESSIONS**

36 - 1202086

In an A.P., if the common difference (d)=-4 and the seventh term ( $a_7$ ) is 4 then find the first term

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37 - 1202102

Find the sum of first 8 multiples of 3

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38 - 1202134

The sum of four consecutive numbers in A.P. is 32 and the ratio of the product of the first and

last term to the product of two middle terms is

7:15. Find the number

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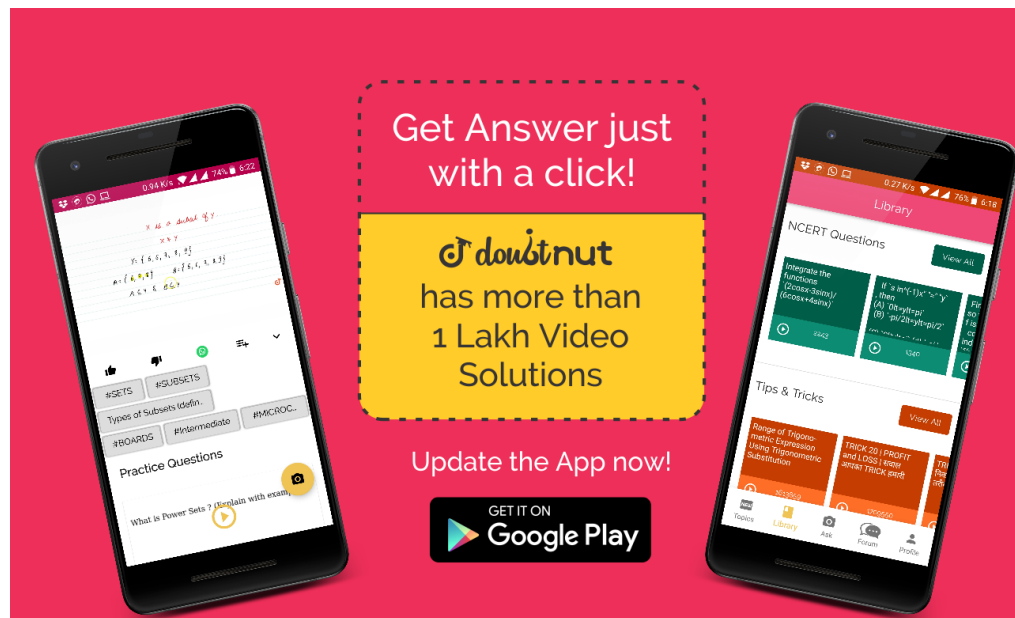
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