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India's Number 1 Education App

## MATHS

# BOOKS - ARIHANT SSC MATHS (HINGLISH) 

## DATA SUFFICIENCY

Example

1. Is A an odd number?
i. A multiplied by an odd number is equal to an
odd number. ii. A is not divisible by 2.

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2. The ages of $P$ andGare in the ratio of $7: 5$.

What is the age of $P$ ?
I. The ages of $P$ andNare in the ratio of $3: 1$.
II. After 7 yr , the ratio of ages of $P$ andAwill be

4:3.

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3. What is the salary of $B$ in a group of $A, B, C$ and $D$ whose average salary is 62880 ?
I. Total of the salaries of $A$ and $C$ is exact multiple of 8.
II. Average of the salary of A, C and D is ? 61665.

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4. What is the three-digit number?
I. The three-digit number is divisible by 9 .
II. The first and third digits are 6 .
5. In a school, each of the 10 teachers gets a salary of Rs 3500, and other 15 teachers, each gets a salary of Rs 4000. Find the average income of a teacher in that school.
A. 4000
B. 3500
C. 4400
D. 5000

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6. What is the capacity of the cylindrical tank?
A. I and II
B. II and III
C. I and III
D. Any two to the tree

Answer: A::B::C

# 7. What is the capacity of the cylindrical tank? 

I. Radius of the base is half of its height.
II. Area of the base is 616 sq m .
III. Height of the cylinder is 28 m .

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8. In a certain company, the ratio of male to
female employees is $7: 8$. If 3 more men were
hired, this ratio would increase to $8: 9$. How many male employees are there in the company?
A. a. I and III
B. b. II and either III or I
C. c. All I, II and III
D. d. Any two of the three

## Answer:

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9. What is the two digit number?
I. Number obtained by interchanging the digits is more than the original number by 9.
II. Sum of the digits is 7 .
III. Difference between the digits is 1 .
A. I and III
B. I and II
C. II and III
D. II and either I or III

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## Fast Track Practice

1. What is the perimeter of a semi-circle?
I. The radius of the semi-circle is equal to half
the side of a square.
II. The area of the square is 196 sq cm
2. What is the exact average of $n, 35,39,42, p$ and $w$ ?

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3. What was the per cent profit/loss earned incurred by selling an article for ? 24000?
I. The ratio of the selling price to the cost price of the article is $5: 3$
II. The difference between the cost price and the selling price is?.
4. What will be the difference between two numbers? I. The square of the first number is 9 times the second number $I$. The ratio of the first number to the second number is $3: 4$

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5. What is the ratio of two numbers $x$ and $y i$
I. $40 \%$ of $x$ is of 50 .
$30 \%$ of $y$ is $25 \%$ of 72

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6. What is the average age of the six members
$\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}$ and F in the family?
I. Average age of $D$ and $E$ is 30 yr
II. Average are of $A, B, C$ and $F$ is 50 yr
III. Average of $A, B, D$ and $E$ is 40 yr
A. I and II
B. I and III
C. II and III

## D. any two three

## Answer: A

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7. What is the area of the right angled triangle?
I. I. Base of the triangle is X cm
II. Height of the triangle is Ycm
III. Hypotenuse of the triangle is $Z \mathrm{~cm}$
A. I and II
B. Only II

## C. II and III

D. Any two of three

## Answer: D

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8. In how many days will $B$ alone complete the
work?
I. A and B together can complete the work in 8 days. II. B and C together can complete the
work in 10 days.
III. A and C together can complete the work in

12 days
A. Only I and II
B. Only II and II
C. I, II and III
D. Data is insufficient

Answer: C

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9. What is the rate of interest percentage per annum?
I. An amount doubles itself at simple interest in 10 yr .
II. Difference between the compound interest and simple interest on an amount of? 15000 in

2 yr is 150 .
III. The compound interest calculated after 8 yr
is more than the amount principle
A. Only I
B. Only II

## C. II and III

## D. Either I or II

## Answer: D

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10. What are the marks scored by Abhijit in

English?
I. Marks scored by Abhijit in Mathematics are more than his marks in Science by 20
II. Total marks scored by Abhijit in

Mathematics, Science and English are 197.
III. Marks scored by Abhijit in Science are more than his marks in English by 12
A. Any two of the three
B. II and III
C. I, II and III
D. Data is insufficient

Answer: C

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11. What is Supriya's present age?
I. Supriya is 3 yr older than Priyaa
II. The ratio of Priya's and Reshma's age is $3: 4$.
A. If the data given in Statement I alone are
sufficient to answer the question
whereas the data given in Statement II
alone are not sufficient to answer the
question
B. If the data given in Statement II alone
are sufficient to answer the question
whereas the data given in Statement
alone are not sufficient to answer the
question
C. If the data in either Statement I alone or
in statement II alone are sufficient to
answer the question
D. If the data in both the Statements I and

II are not sufficient to answer the
question

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12. What is the rate of interest percentage per annum?
I. An amount of 6200 fetches simple interest of

1736 in 2 yr .
II. An amount of 4500 fetches compound interest of 1348.20 in 2 yr .
A. If the data given in Statement I alone are
sufficient to answer the question
whereas the data given in Statement II
alone are not sufficient to answer the
question
B. If the data given in Statement II alone
are sufficient to answer the question
whereas the data given in Statement
alone are not sufficient to answer the
question
C. If the data in either Statement I alone or
in statement II alone are sufficient to
answer the question

## D. If the data in both the Statements I and

II are not sufficient to answer the question

## Answer: C

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13. How many marks did Nigam get in Biology?
I. The boat travels at the speed of $4 \mathrm{~km} / \mathrm{h}$ upstream.
II. The boat travels at the speed of $6 \mathrm{~km} / \mathrm{h}$ downstream.
A. If the data given in Statement I alone are
sufficient to answer the question
whereas the data given in Statement II
alone are not sufficient to answer the
question
B. If the data given in Statement II alone
are sufficient to answer the question
whereas the data given in Statement
alone are not sufficient to answer the
question
C. If the data in either Statement I alone or
in statement II alone are sufficient to
answer the question
D. If the data in both the Statements I and

II are not sufficient to answer the question

## Answer: A

14. What is the two-digit number?
I. The difference between the two digits of the number is 0 .
II. II. The sum of the two-digits of the number is 18.
A. If the data given in Statement I alone are
sufficient to answer the question
whereas the data given in Statement II
alone are not sufficient to answer the
question
B. If the data given in Statement II alone
are sufficient to answer the question
whereas the data given in Statement
alone are not sufficient to answer the
question
C. If the data in either Statement I alone or
in statement II alone are sufficient to
answer the question

# D. If the data given in both the Statements 

 and II are necessary to answer the question
## Answer:

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15. What is the two-digit number?
I. The difference between the two digits of the number is 0 .
II. The sum of the two-digits of the number is 18.
A. If the data given in Statement I alone are
sufficient to answer the question
whereas the data given in Statement II
alone are not sufficient to answer the
question
B. If the data given in Statement II alone
are sufficient to answer the question
whereas the data given in Statement
alone are not sufficient to answer the
question
C. If the data in either Statement I alone or
in statement II alone are sufficient to
answer the question
D. If the data given in both the Statements
and II are necessary to answer the
question

## Answer:

16. What is the number of teachers in the school?
I. Each teacher takes atleast three lectures in a day
II. There are 45 lectures in a week
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement 1
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If you cannot get the answer from the

Statements I and II together but need
even more data

## Answer:

17. In how many years can a simple interest of 6570 be obtained on an amount of 36500 ?
I. The rate of simple interest is $6 \%$ per annum.
II. The difference between the simple interest and compound interest is 402.084
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: A

18. What is the three digit number?
I. Two-fifth of the number is half of 204
II. $20 \%$ of the number is 51 .
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: D

## D Watch Video Solution

19. What is Raveena's age?
I. Raveena is half as old as Karishma
II. Raveena's age is three-fifth of her mother's
age who is 45 yr old
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: B

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20. What is the area of the rectangular plot?
I. The length of the plot is 375 m .
II. The length of the plot is thrice its breadth
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: C

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21. What is the minimum passing percentage in a test?

Raman scored $25 \%$ marks in the test and Sunil scored 288 marks which is 128 more than

Raman
II.Raman scored 64 marks less than the minimum passing marks
A. If the data in Statement I alone are sufficient to answer the question, while
the data in Statement II alone are not
sufficient to answer the question

B. If the data in Statement II alone are

sufficient to answer the question, while
the data in Statement I alone are not
sufficient to answer the question
C. If the data in either Statement I alone or
in Statement II alone are sufficient to
answer the question

# D. If the data in both the Statements I and 

II together are necessary to answer the question

## Answer:

## D Watch Video Solution

22. What is the value of $x^{2}+y+z$ ?
I. $4 x+3 y+5 z=60,2 x=y, 2 y=z$
II. $3 x+3 y+2 z=34,2 x+5 y+6 z=72$
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer

## Answer: A

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23. Whose body weight is second highest among the five boys Arun, Vinay. Suraj, Raju and Pratap?
I. Average weight of Arun, Suraj and Vinay is 68
kg and average weight of Raju and Pratap is 72
kg. Also, Suraj is 78 kg , Raju is 68 kg and Vinay
is 46 kg .
II. Average weight of Arun, Suraj, Vinay and

Raju is 68 kg and also Suraj is 78 kg , Raju is 68
kg and Vinay is 46 kg . All of them have different weight.
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: C

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24. What is the respective ratio between the length of a rectangle and side of a square?
I. Area of the square is 576 sq cm and the area of the rectangle is 600 sq cm
II. Breadth of the rectangle is half the side of the square.
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer:

25. What is the smaller angle of $a$ parallelogram?
I. Ratio between the angles of a triangle is

3:5:4 and the larger angle, of the parallelogram is $34^{\circ}$ more than the largest angle of the triangle.
II. Larger angle of the parallelogram is $38^{\circ}$ more than its smaller angle.
A. If the Statement I alone is sufficient to

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both Statements I and II together are
needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

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26. The ages of Anand and Sujeet are in the ratio of $6: 5$. What is the age of Anand?

The ages of Anand and Sandeep are in the ratio of 10:7. II.After 5yr ,the ratio of Anand's and Sujeet's ages will be 7 : 6
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient

# B. If the Statement II alone is sufficient to 

answer the question but the Statement I
alone is not sufficient
C. If both the Statements I and II together are needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: B

27. What is the three digit number?

I Three-fifth of that number is less than that number by 90
II. One-fourth of that number is $25 \%$ of that number
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient

# B. If the Statement II alone is sufficient to 

answer the question but the Statement
alone is not sufficient
C. If both the Statements I and II together are needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: A

28. In how many days 14 men can complete a piece of work?
I. If 18 women can complete the same piece of work in 24 days
II. If 28 children can complete the same piece of work in 56 days.
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement I
alone is not sufficient
C. If both the Statements I and II together are needed to answer the question
D. If you cannot get the answer from the
statements I and II together but need
even more data

## Answer:

29. What is the salary of $A$, in a group of $A, B, C$,

D and E whose average salary is 65780 ?
I. Total of the salaries of $B$ and $C$ is 88545
II. Total of the salaries of D and E is X 59020
A. If the Statement I alone is sufficient to
answer the question but the Statement

II alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both the Statements I and II together
are needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: C

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30. What is the profit earned by selling a watch for? 15675?
I. Total cost price of 5 such watches is equal to selling price of 4 such watches.

II 25 \% profit is earned by selling each watch.
A. If the Statement I alone is sufficient to
answer the question but the Statement

Il alone is not sufficient
B. If the Statement II alone is sufficient to
answer the question but the Statement
alone is not sufficient
C. If both the Statements I and II together
are needed to answer the question
D. If either the Statement I alone or

Statement II alone is sufficient to answer
the question

## Answer: D

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