

Zoho Aptitude Questions

Aptitude Syllabus

- Number System
- Algebra
- Averages
- Logarithms
- Progressions
- Height & Distance
- Time, Speed & Distance
- Profit & Loss
- Ratio & Proportion
- Simple & Compound Interest
- Geometry & Mensuration
- Simplification
- Probability
- Permutations & Combinations
- Data Sufficiency

If the selling price is doubled, the profit triples. Find the profit percent.

A $66\frac{2}{3}$

B 100

C $105\frac{1}{5}$

D 120

A certain amount earns a simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned?

A

30

B

250

C

350

D

Data inadequate

The calendar for the year 2007 will be the same as the year:

A

2014

B

2016

C

2017

D

2018

A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning with a Sunday is:

A

250

B

276

C

280

D

285

What will be the least number that when doubled will be exactly divisible by 12, 18, 21, and 30?

A

196

B

630

C

1260

D

2520

A motorboat, whose speed is 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

A

4

B

5

C

6

D

10

Odd one out – 6, 9, 15, 21, 24, 28, 30

A

9

B

21

C

24

D

28

A man completes a journey in 10 hours. He travels the first half of the journey at the rate of 21 km/hr and the second half at the rate of 24 km/hr. Find the total journey in km.

A

220 km

B

224 km

C

228 km

D

232 km

A, B, and C subscribe to Rs. 50,000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs. 35,000, A receives:

A

8400

B

11900

C

13600

D

14700

The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, the son's age will be:

A

12

B

14

C

18

D

20

How many times are the hands of a clock at a right angle in a day?

A

22

B

24

C

44

D

48

In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?

A

360

B

480

C

720

D

None

The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is:

A

20

B

30

C

40

D

None

In a 500 m race, the ratio of the speeds of two contestants A and B is 3 : 4. A has a start of 140 m. Then, A wins by:

A

60m

B

40m

C

20m

D

10m

Three unbiased coins are tossed. What is the probability of getting at most two heads?

A

$\frac{3}{4}$

B

$\frac{6}{7}$

C

$\frac{5}{8}$

D

$\frac{7}{8}$

The least perfect square, which is divisible by each of 21, 36 and 66 is ?

A

13414

B

213424

C

213434

D

213444

A farmer bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20% ?

A

7

B

6

C

5

D

2

A train of length 110 meters is running at a speed of 60 kmph. In what time, it will pass a man who is running at 6 kmph in the direction opposite to that in which the train is going ?

A

10

B

8

C

6

D

4

In how many ways, the letters of the word 'BANKING' can be arranged ?

A

5040

B

2540

C

5080

D

2520

A card is drawn from a well-shuffled pack of cards. The probability of getting a queen of club or king of the heart is ?

A

$\frac{1}{52}$

B

$\frac{1}{26}$

C

$\frac{1}{13}$

D

None of these

A man can row at 12 km/hr in still water. He finds that he takes twice as much time to row upstream than to row downstream when he covers a certain distance. Find the speed of the stream.

A

4 km/hr

B

6 km/hr

C

7 km/hr

D

5 km/hr

A Certain sum of money amounts to Rs 2500 in a span of 5 years and further to Rs.3000 in a span of 7 years at simple interest. The sum is_____

A

1200

B

1250

C

1050

D

1000

A rice dealer bought 60 kg of rice worth Rs. 30 per kg and 40 kg of rice worth Rs. 35 per kg. He mixes the two and sells the mixture at Rs. 40 per kg. What is the percentage profit in this deal?

A

18%

B

21%

C

23%

D

25%

A man can finish a work in 20 days, a woman can finish the same work in 30 days, and a boy can finish the same work in 60 days. 2 men, 8 women, and some boys working together can finish the work in 2 days. Find how many boys are working?

A

10 boys

B

8 boys

C

9 boys

D

15 boys

The age of John 10 years ago was thrice the age of his son. After ten years, John's age will be twice that of his son. What is the ratio of their present ages?

A

7:3

B

3:7

C

9:4

D

4:9

Two trains are travelling on parallel tracks in the same direction, at speed of 50 km/hr and 32 km/hr respectively. The faster train crosses the last boggy of the slower train, measuring 18 m in 18 seconds. The length of the faster train is

A

144 m

B

0.072 km

C

720 m

D

1.44 km

An Arab buys two horses, paying Rs. 5000 less for one than for the other. He sells the dearer one at 20% gain and the cheaper one at 30% gain. If he gets Rs. 4000 less on the first than on the second, then the cost price of the second horse is

A

Rs. 10000

B

Rs. 15000

C

Rs. 20000

D

Rs. 25000

A jeep travels a distance of 100 km at a uniform speed. If the speed of the jeep is 5 kmph more, then it takes 1 hour less to cover the same distance. The original speed of the jeep is

A

20 kmph

B

25 kmph

C

30 kmph

D

50 kmph

A trader purchases some glass jars for Rs.1400. Five of them were broken. If he sold remaining at Rs.10 more than cost price, he got a profit of Rs.175. What was cost price of one jar.

A

Rs.20

B

Rs.35

C

Rs.45

D

Rs.70

A tin of oil was $\frac{4}{5}$ full. When six bottles of oil were taken out and four bottles of oil were poured in, it was $\frac{3}{4}$ full. How many bottles of oil does the tin contain initially?

A

16

B

40

C

32

D

None of these

What is A: B, if 50% of A is equal to 60% of B ?

A

5:65:6

B

3:23:2

C

2:32:3

D

6:56:5

A motorist travels to a place 150 km away at an average speed of 50 km/hr and returns at 30km/hr. His average speed for the whole journey in km/hr is:

A

35

B

36

C

37.5

D

38.2

Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:

A

60 gallons

B

100 gallons

C

120 gallons

D

150 gallons

$$(\sqrt{13}+\sqrt{7})(\sqrt{13}-\sqrt{7})=?(13+7)(13-7)=?$$

A

120

B

6

C

181

D

8

Deepu is 15 years old and Radha is 8 years old. How long will it take to them to have a combined age of 35 years ?

A

8

B

5

C

7

D

6

$$8.2 \times 8.2 + 2 \times 8.2 \times 1.8 + 1.8 \times 1.8 = ? \quad 8.2 \times 8.2 + 2 \times 8.2 \times 1.8 + 1.8 \times 1.8 = ?$$

A

92

B

83

C

100

D

The difference between 75% of a number and 20% of the same number is 165. What is the 40% of the number ?

A

300

B

125

C

120

D

355

Two pipes A and B can fill a tank in 20 and 30 minutes respectively. If both the pipes are used together, then how long will it take to fill the tank?

A

12 min

B

25 min

C

30 min

D

50 min

There is 60% increase in an amount in 6 years at simple interest. What will be the compound interest of Rs. 12,000 after 3 years at the same rate?

A

4972

B

3972

C

5972

D

6972

The average of 7 consecutive odd number is 43. Find the largest of these numbers?

A

43

B

49

C

48

D

46

The average of 4 consecutive number is 73.5. Find the largest of these numbers?

A

73

B

75

C

76

D

79

The two trains of length 60 m and 90 m, travel in opposite directions on two parallel tracks at speeds of 50 kmph and 40 kmph respectively. In how many seconds does it take for the two trains to cross each other?

A

4s

B

5s

C

6s

D

7s

The average age of a man and his son is 44 years. The ratio of their ages 11 years back was 9:29:2. What is the present age of the son ?

A

23 years

B

22 years

C

20 years

D

21 years

If 40 % of A is equal to $\frac{23}{23}$ part of B, find A : B?

A

5:3

B

5:7

C

7:10

D

8:11

What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?

A

1:3

B

1:4

C

2:3

D

data is inadequate

A alone can complete a work in 8 days and B alone in 6 days. Starting with A, they work on alternate days. The total work will be completed in?

A

$3\frac{1}{5}$

B

9

C

8

D

7

E

35/6

What is the CI accrued on an amount of Rs. 12000 at the rate of 4% per annum at the end of 2 years?

A

9792

B

979.2

C

499.2

D

977.2

Find the value of $\sqrt{72-\sqrt{72-\sqrt{72-\dots}}}$?

A

6

B

7

C

8

D

10

A table, when sold at Rs. 930, earned a loss of 38 %. Find the cost price of the table ?

A

968

B

1500

C

2447

D

1600

A sum of money is sufficient to pay A's wages for 14 days and B's wages for 21 days. The same money is sufficient to pay the wages of both for?

A

8.4

B

7.8

C

8.6

D

8

E

8.8

Find the value of $\sqrt{56} + \sqrt{56} + \sqrt{56} + \dots + 56 + 56 + 56 + \dots$?

A

9

B

6

C

8

D

7

In an election a candidate who gets 62% of the votes is elected by a majority of 144 votes. What is the total number of votes polled ?

A

500

B

550

C

600

D

700

If a person buys a chicken for Rs.320 and sells it to another person at a profit of 15%, what is the selling price?

A

368

B

348

C

345

D

342

Solution

1. The simple interest on a certain sum of money for 2 year at 12% pa is half of the compound interest on Rs. 10000 for 2 yr at 6% pa. Find the sum placed on simple interest?

A

2755

B

2575

C

7552

D

7525

A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 6 km/hr, find the time taken by the boat to travel 68 km downstream:

A

3.57 hours

B

5 hours

C

4 hours

D

2 hours

If the selling price is doubled, the profit triples. Find the profit percent.

$66\frac{2}{3}$

100

$105\frac{1}{5}$

120

A certain amount earns a simple interest of Rs. 1750 after 7 years. Had the interest been 2% more, how much more interest would it have earned?

30

250

350

Data inadequate

The calendar for the year 2007 will be the same as the year

2014

2016

2017

2018

A library has an average of 510 visitors on Sundays and 240 on other days. The average number of visitors per day in a month of 30 days beginning

with a Sunday is

250

267

286

285

What will be the least number that when doubled will be exactly divisible by 12, 18, 21, and 30?

468

987

1260

1272

A motorboat, whose speed is 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

4

5

3

10

Odd one out – 6, 9, 15, 21, 24, 28, 30

77

9

34

28

A man completes a journey in 10 hours. He travels the first half of the journey at the rate of 21 km/hr and the second half at the rate of 24 km/hr. Find the total journey in km.

324 km

224 km

276 km

894 km

A, B, and C subscribe to Rs. 50,000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs. 35,000, A receives

23700

17896

19087

14700

The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, the son's age will be

78

20

42

21

How many times are the hands of a clock at a right angle in a day?

34

78

44

32

In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?

789

860

720

490

The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is

18

20

47

90

In a 500 m race, the ratio of the speeds of two contestants A and B is 3 : 4. A has a start of 140 m. Then, A wins by

90m

70m

40m

20m

Three unbiased coins are tossed. What is the probability of getting at most two heads?

$\frac{5}{8}$

$\frac{3}{4}$

$\frac{6}{7}$

$\frac{7}{8}$

A train overtakes two persons who are walking in the same direction in which the train is going, at the rate of 2 kmph and 4 kmph and passes them completely in 9 and 10 seconds respectively. The length of the train is:

There is game which lasts for ninety minutes which is played only with 8 players. There are 4 reserve players. These 4 reserve players alternate equally with each player. This means that all players, including the reserves, are on the pitch for exactly the same length of time. For how long is each player on the pitch?

You walk upwards on an escalator, with a speed of 1 step per second. After 50 steps you are at the end. You turn around and run downwards with a speed of 5 steps per second. After 125 steps you are back at the beginning of the escalator. How many steps do you need if the escalator stands still?

The positive integer n is not divisible by 7. The remainder when n^2 is divided by 7 and the remainder when n is divided by 7 are each equal to k . What is k ?

One night three naughty boys stole a basket full of mangoes from a garden, hid the loot and went to sleep. Before retiring they did some quick counting and found that the fruits were less than a 100 in number. During the night one boy awoke, counted the mangoes and found that he could divide the mangoes into 3 equal parts if he first took 1 for himself. He then took 1 mango, ate it up, and took $\frac{1}{3}$ of the rest, hid them separately and went back to sleep. Shortly thereafter another boy awoke, counted the mangoes and he again found that if he took 1 for himself the loot could be divided into 3 equal parts. He ate up one mango, bagged $\frac{1}{3}$ of the remainder, hid them separately and went back to sleep. The third boy also awoke after some time, did the same and went back to sleep. In the morning when they all woke up, and counted their mangoes, they found that the remaining mangoes again totaled 1 more than could be divided into 3 equal parts. How many mangoes did the boys steal ?

In a jungle a man was at one end of the jungle. He has to give a 2 pieces of cake to his friend who was at the other end of the jungle. There were 7 bridges on the way with 7 gatekeepers. Each gatekeeper will take half of the cake he has and will give one piece back to him. How many cakes should the man carry initially?

Two trains start from two opposite directions towards each other. The stations from which they start are 50 miles apart. Both the trains start at the same time on a single track. A falcon which is sitting on one train, starts at the same time towards the other train, as soon as it reaches the second one, it flies back to the first train and so on and so forth. It continues to do so, flying backwards and forwards from one train to the other until the trains meet. Both the trains travel at a speed of 25 miles per hour, and the bird flies at 100 miles per hour. How many miles will the falcon have flown before the trains meet?

In an entrance test, a candidate's point were wrongly taken as 42 instead of 24. Because of that, the average score for the exam got increased by $\frac{3}{4}$. Find the number of candidates who have attended the exam.

A housewife forgot her Bank account PIN Code which is a 5-digit number, but luckily she remembered some hints on how to recall this PIN Code.

The cost price of 12 items is equal to the selling price of 10 items, then find the % profit or loss.

Six white and six black balls are in a bag. How many minimum should be drawn to ensure having a pair of the same colour?

A speaks truth in ratio 3:5 and B speaks truth in ratio 5:3, then what is the ratio (or probability "not sure) that they contradict?

There are 250 scraps. For each 11 cutting one extra can be obtained. How much maximum is possible, if one cut by one unit?

In a pond there was a rose. Daily it was done twice. When was it half of the pond, if it covered the pond on the 23rd day?

If the second term of a G. P. is 2 and the sum of the infinite terms is 8, then what will be the first term?

A and B are having some stuff. If A give 10 of them to B then both will have the same number but if B gives 20 to A then A will become double of B. How much both are having?

40 players are playing a singles-badminton knockout tournament. How many matches must be played to find the winner?

In an exam 80% got a pass in Hindi, 70% in English and 65% in both what is the percentage of failed students?

How many possible ways are there to go from one extreme to another by walking through the edges of a cube?

If a planet completes its circle around the sun in 120 years and another planet in 70 years then when will they come in a straight line as if they are now?

If 7 men working 8 hours in a day cut 6 trees in 9 days then how many days 5 men will take to cut 12 trees working 12 hours in a day? (Don't remember the exact data).

The average mark of 9 students is 50. The average of the first four is 52 and the average of the last four is 49. What is the mark obtained by the fifth student?

A man selling some stuff gives half and one plus to the first customer, $\frac{1}{3}$ rd of the remaining plus one to the second customer, $\frac{1}{4}$ th of the next remaining plus one to the third customer and now the remaining all (not sure) to the fifth customer. If now he is left with zero then how much he had at the beginning? (Something was like that).

A and B start walking in a clockwise direction on a circular path of radius 70. From the same point and same time C starts in anti-clockwise. A and C meet every 88 seconds whereas B and C meet on 110 seconds then when do A and B meet?

The difference of CI and SI on rate $r\%$ for a sum of amount 500/- for 2 years is 2.7 (or 1.27) then find are.

A woman is three years younger than her husband. After 10 years she will be double of her daughter who is 10 years old. What is the current age of her husband?

How much maximum sum you can have in terms of coins of 1 cent, or 2 cents (up to some extent don't remember exactly) so that still you can't give an exact change of 100 dollars?

In a train there are a total of 500 seats. 10% is executive seats and the rest are chair cars. A total of 85% of seats were reserved. If 96% of executives are reserved then what per cent of chair cars are unreserved?

On walking diagonally how much per cent less/more one has to travel to go from one corner to another of a square?

Total is 80, 35% only A, 45% only B, then how much both?

5 letters, 3 boxes then a number of ways they can be posted is?

Starting with a vowel how many words can be formed with the letters in the word EQUATION?

Find the sum of 2, 4, and 8 up to the 12th term.

If at least one 2 rupees coin, two 50 paisa coins, and two 25 paisa coins must be included then how many maximum coins of each combined will be worth Rs. 25/-?

There are 5 men and 4 women. Two women can not sit together. In how many ways they can sit on a circular table?

A train crosses a person in 2 seconds, a platform of length 50 meters in $4\frac{1}{2}$ seconds then what is the length and speed of the train?

In an examination 220 passed in English, 180 in History and 100 in both then find the total.

Write a 10-digit number for which the number " with first one digit is divisible by 1, with first two digits is divisible by 2, with first three digits is divisible by 3, with first four digits is divisible by 4.

There are 3 types of roses-pink, red & yellow. Pink roses cost Rs 0. 5, red roses cost Rs. 10 and yellow cost Rs. 50. Total no of roses is 100. The total cost should be Rs. 1000. Find no of each flower.

If one hen and a half lay one egg and a half in a day and a half, then how many eggs will 5 hens lay in 4 days. (remainder-based)?33) What min no must be subtracted from 1294 so that when divided by 13, 9, 11 leaves the remainder 6.

A woman is 5 years younger than her husband. She is 3 times her daughter's age. After six years her daughter will be 21 years old. Find the woman age.

A and B move in opposite direction by a distance of 4m and then turn left and move a dist of 3 metres. Find the distance between A and B

The sum of the digits of a two-digit no. Is 10. When 72 is subtracted from the no. Then the digits are reversed. Find the no.

In a cricket match the average of 1st three innings is 84. After the 4th match the average

becomes 80, in the 5th match it scores three runs more than the previous match. Find the score in the first match.

There are 8 persons who plan to start a business by making equal investment but finally, 1 person leaves and the remaining 7 persons share the extra amount equally. Find the % increase in the investment.

Find no less than 500 which when divided by 5 leaves remainder 4, when divided by 9, leaves the remainder 7 and when divided by 11 remainder 9.

$\frac{1}{3}$ of a herd of some cows have gone to the forest and twice the square roots of the rest have gone to the mountain and the rest is 15. So how many cows?

Find the smallest four-digit number which, when divided by 12, 15, 25, and 30, leaves no remainder.

If two different numbers, when divided by the same divisor, leave remainders of 7 and 9 respectively, what is the divisor if their sum leaves a remainder of 4 when divided by the same divisor?

If $P:Q=3:4$ and $Q:R=5:6$, then find $P:Q:R$.

When 75% of a number is added to 75, the result is the number itself. Find the number.

Four locations sell tomatoes for 1 kg, 2 kg, 3 kg, and 4 kg per rupee, respectively. What is the average price per kilogram?

Simplify the expression $5^{1/4} \times (125)^{0.25} \times (125)^{0.25} \times (125)^{0.25}$.

Two pipes A and B can fill a tank in 6 hours and 5 hours respectively. If they are turned on alternatively for 1 hour each, how long will it take to fill the tank?

A car travels 25 km/hr faster than a bus for a journey of 500 km. If the bus takes 10 hours more than the car, what are the speeds of the bus and the car?

If the cost price of 20 articles is equal to the selling price of 15 articles, find the profit percentage.

If the ratio of the ages of A and B is 3:5 and after 6 years the ratio will be 9:13, find their present ages.

In how many years will a sum of money double at a rate of 10% per annum compounded annually?

Find the area of a circle whose circumference is 44 cm.

A box contains 4 red, 5 green, and 6 blue balls. If one ball is drawn at random, what is the probability that it is green?

How many ways can 3 books be selected from a shelf of 7 books?

A train 100 meters long is moving at a speed of 60 km/hr. In what time will it pass a man standing near the railway track?

Two trains of lengths 100 meters and 150 meters are running in opposite directions with speeds of 40 km/hr and 50 km/hr respectively. What time will they take to cross each other?

A trader marks his goods at 20% above the cost price and allows a discount of 10% on the marked price. Find his gain percent.

If a shopkeeper offers a discount of 10% on the marked price, and still gains 10%, find the cost price of an article marked at \$90.

The ratio of the ages of two friends is 3:5. The difference between their ages is 6 years. What are their ages?

A and B start a business with investments of \$5000 and \$7000 respectively. If A's share in the profit at the end of one year is \$2000, what is the total profit?

Calculate the simple interest on \$1000 for 2 years at a rate of 5% per annum.

What will be the compound interest on \$1500 for 3 years at a rate of 5% per annum?

A bag contains 5 red, 4 blue, and 3 green balls. If a ball is drawn at random, what is the probability that it is blue?

Two dice are rolled simultaneously. What is the probability of getting a sum of 7?

In how many different ways can the letters of the word 'APPLE' be arranged?

From a group of 7 men and 6 women, a committee of 5 members is to be formed. In how many ways can this be done if the committee should have at least 2 men?

Solve the quadratic equation $x^2 - 5x + 6 = 0$ $x^2 - 5x + 6 = 0$ $x^2 - 5x + 6 = 0$.

Find the LCM and HCF of 72 and 120.

If the difference between the square of a number and the number itself is 132, find the number.

A person crosses a 600 m long street in 5 minutes. What is his speed in km per hour?

3.6

7.2

8.4

10

An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in 1 hours, it must travel at a speed of:

300 kmph

360 kmph

600 kmph

720 kmph

If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:

50 km

56 km

70 km

80 km

A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:

100 kmph

110 kmph

120 kmph

130 kmph

Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

- 9
- 10
- 12
- 20

In a flight of 600 km, an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 km/hr and the time of flight increased by 30 minutes. The duration of the flight is:

- 1 hour
- 2 hours
- 3 hours
- 4 hours

A man complete a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.

- 220 km
- 224 km
- 230 km
- 234 km

The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 km in 4 hours, then the speed of the first train is:

- 70 km/hr
- 75 km/hr
- 84 km/hr

87.5 km/hr

A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is:

35.55 km/hr

36 km/hr

71.11 km/hr

71 km/hr

A car travelling with of its actual speed covers 42 km in 1 hr 40 min 48 sec. Find the actual speed of the car.

17	6	km/hr
	7	

25 km/hr

30 km/hr

35 km/hr

In covering a distance of 30 km, Abhay takes 2 hours more than Sameer. If Abhay doubles his speed, then he would take 1 hour less than Sameer. Abhay's speed is:

5 kmph

6 kmph

6.25 kmph

7.5 kmph

Robert is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.?

8 kmph

11 kmph

12 kmph

14 kmph

It takes eight hours for a 600 km journey, if 120 km is done by train and the rest by car. It takes 20 minutes more, if 200 km is done by train and the rest by car. The ratio of the speed of the train to that of the cars is:

2 : 3

3 : 2

3 : 4

4 : 3

A farmer travelled a distance of 61 km in 9 hours. He travelled partly on foot @ 4 km/hr and partly on bicycle @ 9 km/hr. The distance travelled on foot is:

14 km

15 km

16 km

17 km

A man covered a certain distance at some speed. Had he moved 3 kmph faster, he would have taken 40 minutes less. If he had moved 2 kmph slower, he would have taken 40 minutes more. The distance (in km) is:

35

36	2
	3

37	1
	2

In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?

- 6.25
- 6.5
- 6.75
- 7

A family consists of two grandparents, two parents and three grandchildren. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grandchildren is 6 years. What is the average age of the family?

28	4	years
	7	

31	5	years
	7	

32	1	years
	7	

None of these

A grocer has a sale of Rs. 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs. 6500?

Rs. 4991

Rs. 5991

Rs. 6001

Rs. 6991

The average of 20 numbers is zero. Of them, at the most, how many may be greater than zero?

0

1

10

19

The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?

76 kg

76.5 kg

85 kg

Data inadequate

None of these

The captain of a cricket team of 11 members is 26 years old and the wicket keeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

23 years

24 years

25 years

None of these

The average monthly income of P and Q is Rs. 5050. The average monthly income of Q and R is Rs. 6250 and the average monthly income of P and R is Rs. 5200. The monthly income of P is:

3500

4000

4050

5000

The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:

35 years

40 years

50 years

None of these

A car owner buys petrol at Rs.7.50, Rs. 8 and Rs. 8.50 per litre for three successive years. What approximately is the average cost per litre of petrol if he spends Rs. 4000 each year?

Rs. 7.98

Rs. 8

Rs. 8.50

Rs. 9

In Arun's opinion, his weight is greater than 65 kg but less than 72 kg. His brother does not agree with Arun and he thinks that Arun's weight is greater than 60 kg but less than 70 kg. His mother's view is that his weight cannot be greater than 68 kg. If all are them are correct in their estimation, what is the average of different probable weights of Arun?

67 kg.

68 kg.

69 kg.

Data inadequate

None of these

Which of the following statements is not correct?

$$\log_{10} 10 = 1$$

$$\log (2 + 3) = \log (2 \times 3)$$

$$\log_{10} 1 = 0$$

$$\log (1 + 2 + 3) = \log 1 + \log 2 + \log 3$$

If $\log 2 = 0.3010$ and $\log 3 = 0.4771$, the value of $\log_5 512$ is:

2.870

2.967

3.876

3.912

log 8	is equal to:
log 8	

1
8

1
4

1
2

1
8

If $\log 27 = 1.431$, then the value of $\log 9$ is:

0.934

0.945

0.954

0.958

If log	a	+	log	b	= log ($a + b$), then:
	b			a	

$a + b = 1$

$a - b = 1$

$a = b$

$a^2 - b^2 = 1$

If log ₁₀ 7 = a , then log ₁₀		1		is equal to:
		70		

$-(1 + a)$

$(1 + a)^{-1}$

a
10

1
10 a

If $\log_{10} 2 = 0.3010$, then $\log_2 10$ is equal to:

699
301

1000
301

0.3010

0.6990

If $\log_{10} 2 = 0.3010$, the value of $\log_{10} 80$ is:

1.6020

1.9030

3.9030

None of these

If $\log_{10} 5 + \log_{10} (5x + 1) = \log_{10} (x + 5) + 1$, then x is equal to:

1

3

5

10

The value of		1	+	1	+	1		is:
		$\log_3 60$		$\log_4 60$		$\log_5 60$		

0

1

5

60

Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse is observed from the ships are 30° and 45° respectively. If the lighthouse is 100 m high, the distance between the two ships is:

173 m

200 m

273 m

300 m

A man standing at a point P is watching the top of a tower, which makes an angle of elevation of 30° with the man's eye. The man walks some distance towards the tower to watch its top and the angle of the elevation becomes 60° . What is the distance between the base of the tower and the point P?

43 units

8 units

12 units

Data inadequate

None of these

The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is:

2.3 m

4.6 m

7.8 m

9.2 m

An observer 1.6 m tall is 203 away from a tower. The angle of elevation from his eye to the top of the tower is 30° . The height of the tower is:

21.6 m

23.2 m

24.72 m

None of these

From a point P on a level ground, the angle of elevation of the top tower is 30° . If the tower is 100 m high, the distance of point P from the foot of the tower is:

149 m

156 m

173 m

200 m

A person crosses a 600 m long street in 5 minutes. What is his speed in km per hour?

3.6

7.2

8.4

10

An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in 1 hours, it must travel at a speed of:

300 kmph

360 kmph

600 kmph

720 kmph

If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:

50 km

56 km

70 km

80 km

A train can travel 50% faster than a car. Both start from point A at the same time and reach point B 75 kms away from A at the same time. On the way, however, the train lost about 12.5 minutes while stopping at the stations. The speed of the car is:

100 kmph

110 kmph

120 kmph

130 kmph

Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

9

10

12

20

In a flight of 600 km, an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 km/hr and the time of flight increased by 30 minutes. The duration of the flight is:

- 1 hour
- 2 hours
- 3 hours
- 4 hours

A man complete a journey in 10 hours. He travels first half of the journey at the rate of 21 km/hr and second half at the rate of 24 km/hr. Find the total journey in km.

- 220 km
- 224 km
- 230 km
- 234 km

The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 km in 4 hours, then the speed of the first train is:

- 70 km/hr
- 75 km/hr
- 84 km/hr
- 87.5 km/hr

A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is:

- 35.55 km/hr
- 36 km/hr

71.11 km/hr

71 km/hr

A car travelling with of its actual speed covers 42 km in 1 hr 40 min 48 sec. Find the actual speed of the car.

17	6	km/hr
	7	

25 km/hr

30 km/hr

35 km/hr

Alfred buys an old scooter for Rs. 4700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5800, his gain percent is:

4	4	%
	7	

5	5	%
	11	

10%

12%

The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

- 15
- 16
- 18
- 25

If selling price is doubled, the profit triples. Find the profit percent.

66	2
	3

100

105	1
	3

120

In a certain store, the profit is 320% of the cost. If the cost increases by 25% but the selling price remains constant, approximately what percentage of the selling price is the profit?

- 30%
- 70%
- 100%
- 250%

A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

3

4

5

6

The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?

Rs. 2000

Rs. 2200

Rs. 2400

Data inadequate

A shopkeeper expects a gain of 22.5% on his cost price. If in a week, his sale was of Rs. 392, what was his profit?

Rs. 18.20

Rs. 70

Rs. 72

Rs. 88.25

A man buys a cycle for Rs. 1400 and sells it at a loss of 15%. What is the selling price of the cycle?

Rs. 1090

Rs. 1160

Rs. 1190

Rs. 1202

Sam purchased 20 dozens of toys at the rate of Rs. 375 per dozen. He sold each one of them at the rate of Rs. 33. What was his percentage profit?

3.5

4.5

5.6

6.5

Some articles were bought at 6 articles for Rs. 5 and sold at 5 articles for Rs. 6. Gain percent is:

30%

33	1	%
	3	

35%

44%

A and B together have Rs. 1210. If of A's amount is equal to of B's amount, how much amount does B have?

Rs. 460

Rs. 484

Rs. 550

Rs. 664

Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

2 : 5

3 : 5

4 : 5

6 : 7

A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is B's share?

Rs. 500

Rs. 1500

Rs. 2000

None of these

Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

2 : 3 : 4

6 : 7 : 8

6 : 8 : 9

None of these

In a mixture 60 litres, the ratio of milk and water 2 : 1. If this ratio is to be 1 : 2, then the quantity of water to be further added is:

20 litres

30 litres

40 litres

60 litres

The ratio of the number of boys and girls in a college is 7 : 8. If the percentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?

8 : 9

17 : 18

21 : 22

Cannot be determined

Salaries of Ravi and Sumit are in the ratio 2 : 3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40 : 57. What is Sumit's salary?

Rs. 17,000

Rs. 20,000

Rs. 25,500

Rs. 38,000

If $0.75 : x :: 5 : 8$, then x is equal to:

1.12

1.2

1.25

1.30

The sum of three numbers is 98. If the ratio of the first to second is 2 : 3 and that of the second to the third is 5 : 8, then the second number is:

20

30

48

If Rs. 782 be divided into three parts, proportional to $1 : 2 : 3$, then the first part is:

Rs. 182

Rs. 190

Rs. 196

Rs. 204