

If $21y5$ is a multiple of 9, where y is digit, what is the value of y ?

- A. 1
- B. 2
- C. 5
- D. 6

ANSWER: A

Identify the pattern of the next term 3,9,15,21,....

- A. 27
- B. 23
- C. 33
- D. 36

ANSWER: A

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

- A. Rs.500
- B. Rs.1500
- C. Rs.2000
- D. None

ANSWER: C

The ratio of the cost price and selling price is 4:5 the profit percentage is

- A. 10%
- B. 20%
- C. 25%
- D. 30%

ANSWER: C

A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 4 km/hr, find the time taken by the boat to go 68 km downstream.

- A. 2 hours
- B. 3 hours
- C. 4 hours
- D. 5 hours

ANSWER: C

The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?

- A. 4 years
- B. 8 years
- C. 10 years
- D. None of these

ANSWER: A

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?

- A. 6.25
- B. 6.5
- C. 6.75
- D. 7

ANSWER: A

A man has Rs. 480 in the denominations of one-rupee notes, five-rupee notes and ten-rupee notes. The number of notes of each denomination is equal. What is the total number of notes that he has?

- A. 45
- B. 60
- C. 75
- D. 90

ANSWER: D

An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

- A. 144
- B. 150
- C. 168
- D. 180

ANSWER: D

What least number must be added to 1056, so that the sum is completely divisible by 23?

- A. 2
- B. 3
- C. 18
- D. 21

ANSWER: A

A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?

- A. $\frac{3}{4}$
- B. $\frac{4}{7}$
- C. $\frac{1}{8}$
- D. $\frac{3}{7}$

ANSWER: B

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

- A. 3.6
- B. 7.2
- C. 8.4
- D. 10

ANSWER: B

Question: SI unit of acceleration is _____.

- A. m/s^2
- B. km/h^2
- C. cm/s^2
- D. km/min^2

ANSWER: A

If you write down all the numbers from 1 to 100, then how many times do you write 3?

- A. 11
- B. 18
- C. 20
- D. 21

ANSWER: C

Look at this series: 2, 1, $(\frac{1}{2})$, $(\frac{1}{4})$,.....what number should come next?

- A. $\frac{1}{3}$
- B. $\frac{1}{8}$
- C. $\frac{2}{8}$
- D. $\frac{1}{16}$

ANSWER: B

Edison High School has 840 students, and the ratio of the number of students taking Spanish to the number not taking Spanish is 4:3. How many of the students take Spanish?

- A. 280
- B. 480
- C. 560
- D. 500

ANSWER: B

Edison High School has 840 students, and the ratio of the number of students taking Spanish to the number not taking Spanish is 4:3. How many of the students take Spanish?

- A. 280
- B. 480
- C. 560
- D. 500

ANSWER: B

Let the length of sides of the triangle be represented by $x+3$, $2x-3$, and $3x-5$. If the perimeter of the triangle is 25, what is the length of the shortest side?

- A. 5
- B. 6
- C. 7
- D. 8

ANSWER: C

What is the value of n if $410 \times 642 = 162 \times 4n$?

- A. 6
- B. 10
- C. 12
- D. 15

ANSWER: C

Of the 200 seniors at Monroe High School, exactly 40 are in the band, 60 are in the orchestra, and 10 are in both. How many students are in neither the band nor the orchestra?

- A. 80
- B. 90
- C. 110
- D. 94

ANSWER: C

Twenty children were sharing equally the cost of a present for their teacher. When 4 of the children

decided not to contribute, each of the other children had to pay \$1.5 more. How much did the present cost, in dollars?

- A. 50
- B. 80
- C. 120
- D. 100

ANSWER: C

If $3x=2(5-2x)$, then $x=$

- A. $-10/7$
- B. 0
- C. $3/7$
- D. $10/7$

ANSWER: D

Judy is now twice as old as Adam, but 6 years ago, she was 5 times as old as he was. How old is Judy now?

- A. 10
- B. 16
- C. 20
- D. 24

ANSWER: B

If 25% of 260 equals 6.5% of a , what is a ?

- A. 10
- B. 65
- C. 23
- D. 1000

ANSWER: D

In certain club, the ratio of the number of boy to girls is 5:3. What percentage of the members of the club are girls?

- A. 37.5%
- B. 60%
- C. 50%
- D. 62.3%

ANSWER: A

From 1980 to 1990, Lior's weight increased by 25%. If his weight was k kilograms in 1990, what was it in 1980?

- A. $1.75k$
- B. $0.80k$

C. $0.77k$

D. $0.83k$

ANSWER: B

If 15 workers can pave 18 driveways in 24 days, how many days would it take 40 workers to pave 22 driveways?

- A. 6
- B. 9
- C. 11
- D. 15

ANSWER: C

What is the measure of the angle formed by the minute and hour of a clock at 1:50?

- A. 90 degree
- B. 115 degree
- C. 120 degree
- D. 125 degree

ANSWER: B

If sum of three consecutive integers is less than 75, what is the greatest possible value of the smallest one?

- A. 23
- B. 24
- C. 25
- D. 26

ANSWER: A

If $2 < x < 4$ and $3 < y < 7$, what is the largest integer value of $x+y$?

- A. 7
- B. 8
- C. 9
- D. 10

ANSWER: D

How many positive integers less than 100 have a remainder of 3 when divided by 7?

- A. 14
- B. 15
- C. 13
- D. 12

ANSWER: A

Avi drove from his home to college at 60 miles per hour. Returning over the same route, there was a lot of traffic, and he was only able to drive at 40 miles per hour. If the return trip took 1 hr longer, how many miles did he drive each way?

- A. 200
- B. 312
- C. 114
- D. 120

ANSWER: D

From 1989 to 1990 the number of applicants to college increased 15% to 5060. How many applicants were there in 1989?

- A. 759
- B. 3432
- C. 4400
- D. 5483

ANSWER: C

If a card is drawn at random from a pack of 52 cards, what is the chance of getting a spade or an ace?

- A. $\frac{4}{13}$
- B. $\frac{5}{13}$
- C. 25%
- D. 20%

ANSWER: A

If two unbiased dice are rolled together, what is the probability of getting no difference of points?

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{1}{5}$
- D. $\frac{1}{6}$

ANSWER: A

A stone is thrown upwards, the distance travelled is given by $s = 1 + 4t - 8t^2$ then the distance travelled by the stone is

- A. 1
- B. 2
- C. $\frac{1}{4}$
- D. $\frac{1}{2}$

ANSWER: D

Anand earns Rs.80 in 7 hours and Promod Rs.90 in 12 hours. The ratio of their earnings is

- A. 32:21
- B. 23:12:00
- C. c. 8:9
- D. none of these

ANSWER: B

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

- A. Rs.17,000
- B. 20000
- C. Rs.25,000
- D. none of these

ANSWER: C

A and B can do a piece of work in 8 days, which A alone can do in 12 days. In how many days can B alone do the same work?

- A. 20 days
- B. 24 days
- C. 18 days
- D. 16 days

ANSWER: A

A number consists of two digits. The digit in the ten's place is 3 times the digit in the units place. If 54 is subtracted from the number the digits are reversed.

The number is

- A. 39
- B. 92
- C. 93
- D. 94

ANSWER: D

A man travels equal distances of his journey at 40, 30 and 15 km/hr respectively. Find his average speed for the whole journey.

- A. 24 km/hr
- B. 25 km/hr
- C. 27 km/hr

D. 28 km/hr

ANSWER: D

The average of 5 results is 46 and that of first 4 is 45.

The fifth result is:

A. 1

B. 10

C. 12.5

D. 50

ANSWER: A

The speed of the train from Nagpur to Allahabad is 100 km/hr while when coming back from Allahabad to Nagpur its speed is 150 km/hr, find the average speed during whole journey.

A. 125 km/hr

B. 75 km/hr

C. 135 km/hr

D. 120 km/hr

ANSWER: A

14 workers can make 1400 toys in 5 days. One day after they started the work 14 more workers joined them.

How many days will they take to complete the remaining work?

A. 2

B. 3

C. 4

D. 5

ANSWER: C

15 men can complete a work in 10 days while 20 boys can complete the same work in 15 days. How many days will 10 men and 10 boys together take to complete the same work?

A. 10

B. 8

C. 12

D. 9

ANSWER: C

Two trains for Mumbai leave Delhi at 6 a.m. and 6.45 a.m. and travel at 100 km/hr and 136 km/hr

respectively. How many kilometers from Delhi will the two trains be together?

A. 262.4 km

B. 260 km

C. 283.33 km

D. 275 km

ANSWER: C

If A's salary is 25% more than B's salary then B's salary is how much lesser than A's salary?

A. 33%

B. 25%

C. 20%

D. 16%

ANSWER: C

If Ramesh gets 10% more than Mohan, then Mohan gets.

A. 10% less than Ramesh

B. 10% more than Ramesh

C. less than Ramesh

D. more than Ramesh

ANSWER: C

1°K temperature =

A. 272°C

B. -272°C

C. 98.4°C

D. 37°C

ANSWER: B

An aircraft travelling at 330 meters a second transmits a signal at 10 GHz to a stationary receiver. If the aircraft is flying directly towards the receiver and they are approximately at the same height. Using DOPPLER Principles, the received frequency will be:

A. 11 MHz

B. 11 GHz

C. 9,999989 GHz

D. 10,000011 GHz

ANSWER: D

2 cubes each of volume 64 cm³ are joined end to end. The surface area of the resulting cuboids is.

- A. 75 cm²
 - B. 140 cm²
 - C. 160 cm²
 - D. 143 cm²
- ANSWER: C

The value of $\sin 60^\circ \cos 30^\circ + \sin 30^\circ \cos 60^\circ$ is

- A. $\frac{1}{2}$
- B. $\frac{4}{7}$
- C. $\frac{12}{7}$
- D. 1

ANSWER: D

The area of a rectangular plot is 528 m². The length of the plot (in meters) is one more than twice its breadth. It is required to find the length and breadth of the plot. The representation of the situations in the form of a quadratic equation is

- A. $5x^2 - x - 5$
- B. $5x^2 - x - 5$
- C. $2x^2 + x - 528 = 0$
- D. $5x^2 - x - 5$

ANSWER: C

The distance between aerodromes A and B is 1000 Nautical Miles. At 09:00 an aircraft leaves for B with a speed of 300 Nautical miles per hour. At 09:30 another aircraft leaves for B from A with a speed of 400 Nautical miles per hour. At what approximate time will the second aircraft overtake the first aircraft?

- A. 10:55
- B. 11:15
- C. 10:42
- D. None of the above

ANSWER: C

An aeroplane flies at airspeed of 380 km/hr. It flies from A to B and back to A. Distance AB = 480 km. When going from A to B, it experiences a headwind component = 60 km/hr. The wind remains constant. The duration of the flight will be:

- A. 3h 00min
- B. 2h 35min
- C. 2h 32min

- D. 2h 10min

ANSWER: B

The HCF of 135 and 225 is

- A. 28
- B. 36
- C. 45
- D. 18

ANSWER: C

The distance between the following pairs of points: (2, 3) and (4, 1) in any unit is

- A. 4
- B. 2
- C. 5
- D) 7

ANSWER: B

The area of the triangle whose vertices are (2, 3), (-1, 0), (2, -4)

- A. 20 square units
- B. $2\frac{1}{2}$ square units
- C. 22 square units
- D. 18 square units

ANSWER: B

An aircraft is flying east with a speed of 500 km/hr. There is a tail wind of speed 40 km/hr from 240° with respect to the North. Using triangle law of vectors, the approximate ground speed of the aircraft is

- A. 520 km/hr
- B. 550 km/hr
- C. 480 km/hr
- D. 500 km/hr

ANSWER: A

The fuel burn of an aircraft turbine engine is 220 l/h with a fuel density of 0.80. If the density is 0.75, the fuel burn will be:

- A. 206 l/h
- B. 176 l/h
- C. 235 l/h
- D. 220 l/h

ANSWER: C

A pair of dice is thrown 4 times. If getting a doublet is considered a success, the probability of two successes is.

- A. 25/ 215
- B. 25/216
- C. 4/17
- D. 13/312

ANSWER: B

Approximately how many nautical miles (1 nautical miles=1.85 km approximately) correspond to 12cm on a map with a scale of 1:2 000, 000?

- A. 130
- B. 150
- C. 43
- D. 329

ANSWER: A

Given that at equator $10^\circ = 60$ Nautical Miles. The circumference of the earth around the equator is approximately

- A. 21600NM
- B. 43200NM
- C. 5400NM
- D. 10800NM

ANSWER: A

A line intersecting a circle in two points is called

- A. Secant
- B. Tangent
- C. Cosecant
- D. Sector

ANSWER: A

How many feet are equivalent to 9,5 km?

- A. 50160 ft
- B. 31160 ft
- C. 9500 ft
- D. 57760 ft

ANSWER: B

Given: 1 NM = 1.85 km approximately, Chart scale is 1:1850 000. The chart distance between two points is 4 centimeters. Earth distance is approximately:

- A. 100NM
- B. 40NM
- C. 4NM
- D. 74NM

ANSWER: B

A straight line drawn on a chart measures 4.63cm and represents 150 NM. The chart scale is:(Given: 1 NM = 1.85 km approximately)

- A. 1:5 000 000
- B. 1:3 000 000
- C. 1:1 000 000
- D. 1:6 000 000

ANSWER: D

A man saves Rs. 200 in each of the first three months of his service. In each of the subsequent months his Saving increases by Rs. 40 more than the saving of immediately previous month. His total saving from the Start of service will be Rs. 11040 after:

- A. 18months
- B. 19months
- C. 20months
- D. 21months

ANSWER: D

Two aircraft are flying in the opposite direction separated by 1000 feet vertically and 600 km horizontally. One departs from aerodrome A with a speed of 150 km/hr and the other departs from aerodrome B with a speed of 175 km/hr. At what distance from A will the two aircraft cross each other?

- A. 250 km
- B. 277 km
- C. 300 km
- D. None of the above

ANSWER: B

Given: Direct Mercator chart with a scale of 1:200 000 at equator. Chart length from "A" to "B", in the vicinity

of the equator, 11cm. What is the approximate distance from "A" to "B"?

- A. 14NM
- B. 21NM
- C. 12NM
- D. 22NM

ANSWER: C

How many degrees the earth rotates in an hour

- A. 24
- B. 360
- C. 15
- D. None of the above

ANSWER: C

The next term of the AP $\sqrt{2}$, $\sqrt{8}$, $\sqrt{18}$, $\sqrt{32}$, is

- A. $\sqrt{32}$
- B. $\sqrt{72}$
- C. $\sqrt{50}$
- D. $\sqrt{128}$

ANSWER: C

If $2A = 3B = 4C$ then $A : B : C$ is

- A. 2 : 3 : 4
- B. 4 : 3 : 2
- C. 6 : 4 : 3
- D. 20 : 15 : 2

ANSWER: C

In a school 10% of the boys are same in the number as $\frac{1}{4}$ th of the girls. What is the ratio of boys to girls in that school

- A. 3 : 2
- B. 5 : 2
- C. 2 : 1
- D. 4 : 3

ANSWER: B

Equation of circle through origin which cuts intercepts of length a and b on both axes.

- A. $x^2 + y^2 + ax + by = 0$
- B. $x^2 + y^2 - ax - by = 0$
- C. $x^2 + y^2 + bx + ax = 0$
- D. None of these

ANSWER: B

Find the value of $\frac{1}{2} \times 3 + \frac{1}{3} \times 4 + \frac{1}{4} \times 5 + \dots + \frac{1}{9} \times 10$

- A. $\frac{2}{5}$
- B. $\frac{11}{90}$
- C. $\frac{1}{6}$
- D. $\frac{5}{2}$

ANSWER: A

The Perimeter of one face of a cube is 20cm. It's volume must be

- A. 400 cm^3
- B. 125 cm^3
- C. 1000 cm^3
- D. 8000 cm^3

ANSWER: B

Two dices are tossed. The probability that the total score is a prime number is

- A. $\frac{1}{6}$
- B. $\frac{5}{12}$
- C. $\frac{1}{2}$
- D. $\frac{7}{9}$

ANSWER: B

15th term of the sequence $x - 7, x - 2, x + 3, \dots$ is

- A. $x + 63$
- B. $x + 73$
- C. $x + 83$
- D. $x + 53$

ANSWER: A

Which of the following train is fastest :

- A. 25 m/sec
- B. 1500 m/min
- C. 90 km/hr
- D. None of these

ANSWER: D

A person travels from P to Q at a speed of 40 km/hr and returned by increasing his speed by 50% what is the average speed for both trips

- A. 36 km/hr
- B. 45 km/hr

C. 48 km/hr

D. 50 km/hr

ANSWER: C

The HCF of two numbers is 8. Which one of the following can never be their L.C.M :

A. 24

B. 48

C. 56

D. 60

ANSWER: D

If points (a,0), (0,b) and (1,1) are collinear then $\frac{1}{a} + \frac{1}{b} =$

A. 1

B. 2

C. 0

D. -1

ANSWER: C

If the lines $x + q = 0$, $y - 2 = 0$ and $3x + 2y + 5 = 0$ are concurrent, then the value of q is:

A. 1

B. 2

C. 3

D. 5

ANSWER: C

What is the value of $P + \frac{Q}{P} - Q$ if $\frac{P}{Q} = 7$

A. $\frac{1}{3}$

B. $\frac{2}{3}$

C. $\frac{4}{3}$

D. $\frac{7}{8}$

ANSWER: C

$11^2 + 12^2 + 13^2 + \dots + 20^2 =$

A. 385

B. 2485

C. 2870

D. 3255

ANSWER: B

Three numbers are in ratio 1 : 2 : 3 and their HCF is the numbers are

A. 4, 8, 12

B. 5, 10, 15

C. 10, 20, 30

D. 12, 24, 36

ANSWER: D

The ratio of volume of cube to that of sphere which will fill inside the cube is

A. $4 : \pi$

B. $4 : 3\pi$

C. $6 : \pi$

D. $2 : \pi$

ANSWER: C

If an unbiased coin is tossed once then the two events Head and Tail are:

A. Exhaustive

B. Mutually exclusive

C. Equally Likely

D. All of these

ANSWER: D

A body rises vertically from the earth according to the law $s = 64t - 16t^2$. If it has lost k times its velocity in its 48 ft rise, then k =

A. 1

B. $\frac{1}{2}$

C. $\frac{1}{3}$

D. $\frac{1}{9}$

ANSWER: B

The inverse ratio of 11:15 is

A. 15 : 11

B. 19:48

C. 121 : 225

D. None of these

ANSWER: A

A steamer goes downstream from one part to another in 4 hours. It covers the same distance upstream in 5 hours. If the speed of the stream be 2 km per hour, find the distance between the two ports.

A. 60 km

B. 80 km

C. 70 km

D. 55 km

ANSWER: B

The average of the first three numbers is double of the fourth number. If the average of all the four numbers is 12, find the 4th number.

A. 16

B. 48/7

C. 20

D. 18

ANSWER: B

Anil took four tests during first year. His average on them was 76. He took 3 tests during the second year. His average on them was 81. What was his overall average for both years?

A. 542/7

B. 539/7

C. 536/7

D. 547/7

ANSWER: D

14 workers can make 1400 toys in 5 days. One day after they started the work 14 more workers joined them. How many days will they take to complete the remaining work?

A. 2

B. 3

C. 4

D. 7/2

ANSWER: A

Ganesh, Ram and Sohan together can do a work in 16 days. If Ganesh and Ram together can do the same work in 24 days then, how long will take Sohan alone to do the same work?

A. 42 days

B. 24 days

C. 36 days

D. 48 days

ANSWER: D

If a 100 metre long train which is moving at 50 km. per hour, crosses another train which is 120 metre long and moving in opposite direction in 6 seconds, what is the speed of the second train?

A. 132 km/hr

B. 83 km/hr

C. 60 km/hr

D. 50 km/hr

ANSWER: B

The air consists of 79.2% of Nitrogen 20.7% of Oxygen, 0.08% of other light gases and the remaining gas is Argon. Find out the volume of the air consisting one cubic metre of Argon.

A. 500 cu. metre

B. 50 cu. metre

C. 5 cu. metre

D. 5000 cu. metre

ANSWER: D

1 pound =

A. 0.45kgs

B. 0.2kgs

C. 1kg

D. 1.2kgs

ANSWER: A