

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

18 Three friends divided some bullets equally. After all of them shot 4 bullets the total number of bullets remaining is equal to the bullets each had after division. Find the original number divided.

Answer

18

Assume that initial there were $3 \times X$ bullets.

So they got X bullets each after division.

All of them shot 4 bullets. So now they have $(X - 4)$ bullets each.

But it is given that, after they shot 4 bullets each, total number of bullets remaining is equal to the bullets each had after division i.e. X

Therefore, the equation is

$$3 \times (X - 4) = X$$

$$3 \times X - 12 = X$$

$$2 \times X = 12$$

$$X = 6$$

Therefore the total bullets before division is $= 3 \times X = 18$

Find sum of digits of D .

Let

$$A = 1999^{1999}$$

B = sum of digits of A

C = sum of digits of B

D = sum of digits of C

(HINT : $A = B = C = D \pmod{9}$)

Answer

The sum of the digits of D is 1.

Let E = sum of digits of D .

It follows from the hint that $A = E \pmod{9}$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 1
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Consider ,

$$\begin{aligned}
 A &= 1999^{1999} \\
 &< 2000^{2000} \\
 &= 2^{2000} * 1000^{2000} \\
 &= 1024^{200} * 10^{6000} \\
 &< 10^{800} * 10^{6000} \\
 &= 10^{6800}
 \end{aligned}$$

$$\begin{aligned}
 \text{i.e. } A &< 10^{6800} \\
 \text{i.e. } B &< 6800 * 9 = 61200 \\
 \text{i.e. } C &< 5 * 9 = 45 \\
 \text{i.e. } D &< 2 * 9 = 18
 \end{aligned}$$

$$\begin{aligned}
 \text{i.e. } E &\leq 9 \\
 \text{i.e. } E &\text{ is a single digit number.}
 \end{aligned}$$

Also ,

$$\begin{aligned}
 1999 &= 1 \pmod{9} \\
 \text{so } 1999^{1999} &= 1 \pmod{9}
 \end{aligned}$$

Therefore we conclude that E=1.

There is a 50m long army platoon marching ahead. The last person in the platoon wants to give a letter to the first person leading the platoon. So while the platoon is marching he runs ahead, reaches the first person and hands over the letter to him and without stopping he runs and comes back to his original position.

In the mean time the whole platoon has moved ahead by 50m.

The question is how much distance did the last person cover in that time. Assuming that he ran the whole distance with uniform

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

speed.

Submitted

Answer

**The last person covered
120.71 meters.**

It is given that the platoon and the last person moved with uniform speed. Also, they both moved for the identical amount of time. Hence, the ratio of the distance they covered - while person moving forward and backward - are equal.

Let's assume that when the last person reached the first person, the platoon moved X meters forward.

Thus, while moving forward the last person moved (50+X) meters whereas the platoon moved X meters.

Similarly, while moving back the last person moved [50-(50-X)] X meters whereas the platoon moved (50-X) meters.

Now, as the ratios are equal,
 $(50+X)/X = X/(50-X)$

$$(50+X)*(50-X) = X*X$$

Solving, X=35.355 meters

Thus, total distance covered by the last person

$$\begin{aligned} &= (50+X) + X \\ &= 2*X + 50 \\ &= 2*(35.355) + 50 \\ &= 120.71 \text{ meters} \end{aligned}$$

Note that at first glance, one might think that the total distance covered by the last person is 100 meters, as he ran the total length of the platoon (50 meters) twice. TRUE, but that's the relative distance covered by the last person i.e. assuming that the platoon is stationary.

If you take a marker & start from a corner on a cube, what is the maximum number of edges you can trace across if you never trace across the same edge twice, never remove the marker from the cube, & never trace anywhere

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 3
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

on the cube, except for the
corners & edges?

Answer

9

To verify this, you can make a
drawing of a cube, & number
each of its 12 edges. Then,
always starting from 1 corner &
1 edge, you can determine all
of the possible combinations for
tracing along the edges of a
cube.

There is no need to start from
other corners or edges of the
cube, as you will only be
repeating the same
combinations. The process is a
little more involved than this,
but is useful for solving many
types of spatial puzzles.

One of Mr. Bajaj, his wife, their
son and Mr. Bajaj's mother is
an Engineer and another is a
Doctor.

- If the Doctor is a male,
then the Engineer is a
male.

- If the Engineer is younger
than the Doctor, then the
Engineer and the Doctor
are not blood relatives.
- If the Engineer is a
female, then she and the
Doctor are blood
relatives.

Can you tell who is the Doctor
and the Engineer?

Answer

**Mr. Bajaj is the Engineer and
either his wife or his son is
the Doctor.**

Mr. Bajaj's wife and mother are
not blood relatives. So from 3, if
the Engineer is a female, the
Doctor is a male. But from 1, if
the Doctor is a male, then the
Engineer is a male. Thus, there
is a contradiction, if the
Engineer is a female. Hence,
either Mr. Bajaj or his son is the
Engineer.

Mr. Bajaj's son is the youngest
of all four and is blood relative
of each of them. So from 2, Mr.
Bajaj's son is not the Engineer.
Hence, Mr. Bajaj is the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 4
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Engineer.

Thus, Sam is married to Tina.

Now from 2, Mr. Bajaj's mother
can not be the Doctor. So the
Doctor is either his wife or his
son . It is not possible to
determine anything further.

As Cam does not play bridge,
Billy's husband must be Laurie.

Hence, Carrie is married to
Cam.

Three men - Sam, Cam and
Laurie - are married to Carrie,
Billy and Tina, but not
necessarily in the same order.

There are 3 persons X, Y and
Z. On some day, X lent tractors
to Y and Z as many as they
had. After a month Y gave as
many tractors to X and Z as
many as they have. After a
month Z did the same thing. At
the end of this transaction each
one of them had 24.

Sam's wife and Billy's Husband
play Carrie and Tina's husband
at bridge. No wife partners her
husband and Cam does not
play bridge.

Find the tractors each originally
had?

Who is married to Cam?

Answer

Answer

Carrie is married to Cam.

One way to solve it is by
making 3 equations and solve
them simultaneously. But there
is rather easier way to solve it
using Backtracing.

"Sam's wife and Billy's
Husband play Carrie and Tina's
husband at bridge."

It's given that at the end, each
had 24 tractors (24, 24, 24) i.e.
after Z gave tractors to X & Y

It means that Sam is not
married to either Billy or Carrie.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 5
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

as many as they had. It means that after getting tractors from Z their tractors got doubled. So before Z gave them tractors, they had 12 tractors each and Z had 48 tractors. (12, 12, 48)

Similarly, before Y gave tractors to X & Z, they had 6 & 24 tractors respectively and Y had 42 tractors i.e. (6, 42, 24)

Again, before X gave tractors to Y & Z, they had 21 & 12 tractors respectively and X had 39 tractors i.e. (39, 21, 12)

Hence, initially **X had 39 tractors, Y had 21 tractors and Z had 12 tractors.**

A certain street has 1000 buildings. A sign-maker is contracted to number the houses from 1 to 1000. How many zeroes will he need?

Answer

The sign-maker will need 192 zeroes.

Divide 1000 building numbers

into groups of 100 each as follow:
(1..100), (101..200), (201..300),
..... (901..1000)

For the first group, sign-maker will need 11 zeroes.

For group numbers 2 to 9, he will require 20 zeroes each.

And for group number 10, he will require 21 zeroes.

The total numbers of zeroes required are
 $= 11 + 8 \times 20 + 21$
 $= 11 + 160 + 21$
 $= 192$

There are 9 coins. Out of which one is odd one i.e weight is less or more. How many iterations of weighing are required to find odd coin?

Answer

It is always possible to find odd coin in 3 weighings and to tell whether the odd coin is heavier or lighter.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 6
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

1. Take 8 coins and weigh 4 against 4.
 - If both are not equal, goto step 2
 - If both are equal, goto step 3
2. One of these 8 coins is the odd one. Name the coins on heavier side of the scale as H1, H2, H3 and H4. Similarly, name the coins on the lighter side of the scale as L1, L2, L3 and L4. Either one of H's is heavier or one of L's is lighter. Weigh (H1, H2, L1) against (H3, H4, X) where X is one coin remaining in initial weighing.
 - If both are equal, one of L2, L3, L4 is lighter. Weigh L2 against L3.
 - If both are equal, L4 is the odd coin and is lighter.
 - If L2 is light, L2 is the odd coin and is lighter.
 - If (H1, H2, L1) is heavier side on the scale, either H1 or H2 is heavier. Weigh H1 against H2
 - If both are equal, there is some error.
 - If H1 is heavy, H1 is the odd coin and is heavier.
 - If H2 is heavy, H2 is the odd coin and is heavier.
 - If (H3, H4, X) is heavier side on the scale, either H3 or H4 is heavier or L1

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 7
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

is lighter. Weigh H3
 against H4

- If both are equal, L1 is the odd coin and is lighter.
- If H3 is heavy, H3 is the odd coin and is heavier.
- If H4 is heavy, H4 is the odd coin and is heavier.

1. On the first day 1 medal and $\frac{1}{7}$ of the remaining $m - 1$ medals were awarded.
2. On the second day 2 medals and $\frac{1}{7}$ of the now remaining medals was awarded; and so on.
3. On the n^{th} and last day, the remaining n medals were awarded.

How many days did the contest last, and how many medals were awarded altogether?

Answer

3. The remaining coin X is the odd one. Weigh X against the anyone coin used in initial weighing.
 - If both are equal, there is some error.
 - If X is heavy, X is the odd coin and is heavier.
 - If X is light, X is the odd coin and is lighter.

Total 36 medals were awarded and the contest was for 6 days.

On day 1: Medals awarded = $(1 + \frac{35}{7}) = 6$: Remaining 30 medals

On day 2: Medals awarded = $(2 + \frac{28}{7}) = 6$: Remaining 24 medals

On day 3: Medals awarded = $(3 + \frac{21}{7}) = 6$: Remaining 18 medals

On day 4: Medals awarded = $(4 + \frac{14}{7}) = 6$: Remaining 12 medals

In a sports contest there were m medals awarded on n successive days ($n > 1$).

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 8
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

On day 5: Medals awarded = $(5 + 7/7) = 6$: Remaining 6 medals
On day 6: Medals awarded 6

I got this answer by writing
small program. If anyone know
any other simpler method, do
submit it.

A number of 9 digits has the
following properties:

- The number comprising the leftmost two digits is divisible by 2, that comprising the leftmost three digits is divisible by 3, the leftmost four by 4, the leftmost five by 5, and so on for the nine digits of the number i.e. the number formed from the first n digits is divisible by n , $2 \leq n \leq 9$.
- Each digit in the number is different i.e. no digits are repeated.
- The digit 0 does not occur in the number i.e. it is comprised only of the digits 1-9 in some order.

Find the number.

Answer

The answer is **381654729**

One way to solve it is Trial-&-Error. You can make it bit easier as odd positions will always occupy ODD numbers and even positions will always occupy EVEN numbers. Further 5th position will contain 5 as 0 does not occur.

The other way to solve this problem is by writing a computer program that systematically tries all possibilities

$1/3$ rd of the contents of a container evaporated on the 1st day. $3/4$ th of the remaining contents of the container evaporated on the second day.

What part of the contents of the container is left at the end of the second day?

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Answer

Assume that contents of the container is X

On the first day $\frac{1}{3}$ rd is evaporated.
 $(1 - \frac{1}{3})$ of X is remaining i.e.
 $(\frac{2}{3})X$

On the Second day $\frac{3}{4}$ th is evaporated. Hence,
 $(1 - \frac{3}{4})$ of $(\frac{2}{3})X$ is remaining
i.e. $(\frac{1}{4})(\frac{2}{3})X = (\frac{1}{6})X$

Hence $\frac{1}{6}$ th of the contents of the container is remaining

Vipul was studying for his examinations and the lights went off. It was around 1:00 AM. He lighted two uniform candles of equal length but one thicker than the other. The thick candle is supposed to last six hours and the thin one two hours less. When he finally went to sleep, the thick candle was twice as long as the thin one.

For how long did Vipul study in candle light?

Answer

Vipul studied for 3 hours in candle light.

Assume that the initial length of both the candle was L and Vipul studied for X hours.

In X hours, total thick candle burnt = $\frac{XL}{6}$

In X hours, total thin candle burnt = $\frac{XL}{4}$

After X hours, total thick candle remaining = $L - \frac{XL}{6}$

After X hours, total thin candle remaining = $L - \frac{XL}{4}$

Also, it is given that the thick candle was twice as long as the thin one when he finally went to sleep.

$$(L - \frac{XL}{6}) = 2(L - \frac{XL}{4})$$

$$(6 - X)/6 = (4 - X)/2$$

$$(6 - X) = 3(4 - X)$$

$$6 - X = 12 - 3X$$

$$2X = 6$$

$$X = 3$$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 10
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Hence, Vipul studied for 3
hours i.e. 180 minutes in candle
light.

If you started a business in
which you earned Rs.1 on the
first day, Rs.3 on the second
day, Rs.5 on the third day, Rs.7
on the fourth day, & so on.

How much would you have
earned with this business after
50 years (assuming there are
exactly 365 days in every
year)?

Answer

Rs.333,062,500

To begin with, you want to
know the total number of days:
 $365 \times 50 = 18250$.

By experimentation, the
following formula can be
discovered, & used to
determine the amount earned
for any particular day: $1 + 2(x-1)$, with x being the number of
the day. Take half of the 18250
days, & pair them up with the

other half in the following way:
day 1 with day 18250, day 2
with day 18249, & so on, & you
will see that if you add these
pairs together, they always
equal Rs.36500.

Multiply this number by the total
number of pairs (9125), & you
have the amount you would
have earned in 50 years.

Math gurus may use series
formula to solve it.(series:
1,3,5,7,9,11.....upto 18250
terms)

A worker earns a 5% raise. A
year later, the worker receives
a 2.5% cut in pay, & now his
salary is Rs. 22702.68

What was his salary to begin
with?

Answer

Rs.22176

Assume his salary was Rs. X

He earns 5% raise. So his
salary is $(105 \times X)/100$

A year later he receives 2.5%

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 11
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

cut. So his salary is
 $((105 \times X)/100) \times (97.5/100)$ which
is Rs. 22702.68

Hence, solving equation
 $((105 \times X)/100) \times (97.5/100) =$
22702.68
 $X = 22176$

At 6'o a clock ticks 6 times. The
time between first and last ticks
is 30 seconds. How long does it
tick at 12'o.

Answer

66 seconds

It is given that the time between
first and last ticks at 6'o is 30
seconds.

Total time gaps between first
and last ticks at 6'o = 5
(i.e. between 1 & 2, 2 & 3, 3 &
4, 4 & 5 and 5 & 6)

So time gap between two ticks
= $30/5 = 6$ seconds.

Now, total time gaps between
first and last ticks at 12'o = 11

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 12
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Therefore time taken for 12
ticks = $11 \times 6 = 66$ seconds
(and not 60 seconds)

500 men are arranged in an
array of 10 rows and 50
columns according to their
heights.

Tallest among each row of all
are asked to come out. And the
shortest among them is A.

Similarly after resuming them to
their original positions, the
shortest among each column
are asked to come out. And the
tallest among them is B.

Now who is taller A or B ?

Answer

	C1	C2	C3	C4	C5	.....	C48	C49	C50	A
R1	1	2	3	4	5	.....	48	49	50	50
R2	51	52	53	54	55	.....	98	99	100	100
R3	101	102	103	104	105	.....	148	149	150	150
...
...
R9	401	402	403	404	405	.....	448	449	450	450
R10	451	452	453	454	455	.....	498	499	500	500
	1	2	3	4	5	.....	48	49	50	B

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

No one is taller, both are same as A and B are the same person.

As it is mentioned that 500 men are arranged in an array of 10 rows and 50 columns **according to their heights.** Let's assume that position numbers represent their heights. Hence, the shortest among the 50, 100, 150, ... 450, 500 is person with height 50 i.e. A. Similarly the tallest among 1, 2, 3, 4, 5, 48, 48, 50 is person with height 50 i.e. B

Now, both A and B are the person with height 50. Hence both are same.

In Mr. Mehta's family, there are one grandfather, one grandmother, two fathers, two mothers, one father-in-law, one mother-in-law, four children, three grandchildren, one brother, two sisters, two sons, two daughters and one daughter-in-law.

How many members are there in Mr. Mehta's family? Give minimal possible answer.

Answer

There are 7 members in Mr. Mehta's family. Mother & Father of Mr. Mehta, Mr. & Mrs. Mehta, his son and two daughters.

Mother & Father of Mr. Mehta

Mr. & Mrs. Mehta

One Son & Two Daughters

When Alexander the Great attacked the forces of Porus, an Indian soldier was captured by the Greeks. He had displayed such bravery in battle, however, that the enemy offered to let him choose how he wanted to be killed. They told him, "If you tell a lie, you will put to the sword, and if you tell the truth you will be hanged."

The soldier could make only one statement. He made that statement and went free. What did he say?

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 13
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Answer

The soldier said, "You will put me to the sword."

The soldier has to say a Paradox to save himself. If his statement is true, he will be hanged, which is not the sword and hence false. If his statement is false, he will be put to the sword, which will make it true. A Paradox !!!

A person wanted to withdraw X rupees and Y paise from the bank. But cashier made a mistake and gave him Y rupees and X paise. Neither the person nor the cashier noticed that.

After spending 20 paise, the person counts the money. And to his surprise, he has double the amount he wanted to withdraw.

Find X and Y. (1 Rupee = 100 Paise)

$$2 * (100X + Y) = 100Y + X - 20$$

$$200X + 2Y = 100Y + X - 20$$

$$199X - 98Y = -20$$

$$98Y - 199X = 20$$

Answer

As given, the person wanted to withdraw $100X + Y$ paise.

But he got $100Y + X$ paise.

After spending 20 paise, he has double the amount he wanted to withdraw. Hence, the equation is

Now, we got one equation; but there are 2 variables. We have to apply little bit of logic over

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 14
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahooogroups.com

here. We know that if we
interchange X & Y, amount gets
double. So Y should be twice of
X or one more than twice of X
i.e. $Y = 2X$ or $Y = 2X+1$

Case I : $Y=2X$

Solving two equations
simultaneously

$$98Y - 199X = 20$$

$$Y - 2X = 0$$

We get $X = -20/3$ & $Y = -40/2$

Case II : $Y=2X+1$

Solving two equations
simultaneously

$$98Y - 199X = 20$$

$$Y - 2X = 1$$

We get $X = 26$ & $Y = 53$

Now, its obvious that he wanted
to withdraw Rs. 26.53

The game of Tic-Tac-Toe is
being played between two
players. Only the last mark to
be placed in the game as
shown.



Who will win the game, O or X?
Can you tell which was the
sixth mark and at which
position? Do explain your
answer.

At the Party:

1. There were 9 men and children.
2. There were 2 more women than children.
3. The number of different man-woman couples possible was 24. Note that if there were 7 men

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

and 5 women, then there
would have been 35 man-
woman couples possible.

Also, of the three groups -
men, women and children
- at the party:

4. There were 4 of one
group.
5. There were 6 of one
group.
6. There were 8 of one
group.

Exactly one of the above 6
statements is false.

Can you tell which one is false?
Also, how many men, women
and children are there at the
party

Assume that both the players
are intelligent enough.

Answer

O will win the game. The

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 16
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

sixth mark was X in square 9.

The 7th mark must be placed in
square 5 which is the win
situation for both X and O.
Hence, the 6th mark must be
placed in a line already
containing two of the opponents
marks. There are two such
possibilities - the 6th mark
would have been either O in
square 7 or X in square 9.

As we know both the players
are intelligent enough, the 6th
mark could not be O in square
7. Instead, he would have
placed O in square 5 and would
have won.

Hence, the sixth mark must be
X placed in square 9. And the
seventh mark will be O. Thus O
will win the game.

Answer

**Statement (4) is false. There
are 3 men, 8 women and 6
children.**

Assume that Statements (4),
(5) and (6) are all true. Then,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Statement (1) is false. But then
Statement (2) and (3) both can
not be true. Thus, contradictory
to the fact that exactly one
statement is false.

So Statement (4) or Statement
(5) or Statement (6) is false.
Also, Statements (1), (2) and
(3) all are true.

From (1) and (2), there are 11
men and women. Then from
(3), there are 2 possible cases -
either there are 8 men and 3
women or there are 3 men and
8 women.

If there are 8 men and 3
women, then there is 1 child.
Then Statements (4) and (5)
both are false, which is not
possible.

Hence, there are 3 men, 8
women and 6 children.
Statement (4) is false.

There is a shortage of
tubelights, bulbs and fans in a
village - Kharghar. It is found
that

- All houses do not have
either tubelight or bulb or
fan.
- exactly 19% of houses do
not have just one of
these.
- atleast 67% of houses do
not have tubelights.
- atleast 83% of houses do
not have bulbs.
- atleast 73% of houses do
not have fans.

What percentage of houses do
not have tubelight, bulb and
fan?

Answer

**42% houses do not have
tubelight, bulb and fan.**

Let's assume that there are 100
houses. Hence, there should be
total 300 items i.e. 100
tubelights, 100 bulbs and 100
fans.

From the given data, we know
that there is shortage of atleast
(67+83+73) 223 items in every
100 houses.

Also, exactly 19 houses do not

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 17
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

have just one item. It means that remaining 81 houses should account for the shortage of remaining (223-19) 204 items. If those remaining 81 houses do not have 2 items each, there would be a shortage of 162 items. But total of 204 items are short. Hence, atleast (204-162) 42 houses do not have all 3 items - tubelight, bulb and fan.

Thus, 42% houses do not have tubelight, bulb and fan.
Mr. Subramaniam rents a private car for Andheri-Colaba-Andheri trip. It costs him Rs. 300 everyday.

Mr. Subramaniam that there One day the car driver informed were two students from Bandra who wished to go from Bandra to Colaba and back to Bandra. Bandra is halfway between Andheri and Colaba. Mr. Subramaniam asked the driver to let the students travel with him.

On the first day when they came, Mr. Subramaniam said,

"If you tell me the mathematically correct price you should pay individually for your portion of the trip, I will let you travel for free."

How much should the individual student pay for their journey?

Answer

The individual student should pay Rs. 50 for their journey.

Note that 3 persons are travelling between Bandra and Colaba.

The entire trip costs Rs. 300 to Mr. Subramanian. Hence, half of the trip costs Rs. 150.

For Andheri-Bandra-Andheri, only one person i.e. Mr. Subramanian is travelling. Hence, he would pay Rs. 150.

For Bandra-Colaba-Bandra, three persons i.e Mr. Subramanian and two students, are travelling. Hence, each student would pay Rs. 50.

Substitute digits for the letters

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 18
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

to make the following Division
 true

```

                                O  U
T
-----
-
      S T E M | D E M I S
E
                                | D M O C
                                -----
-
                                T U I S
                                S T E M
                                -----
-
                                Z Z Z
E
                                Z U M
M
                                -----
-
                                I  S
T

```

Note that the leftmost letter
 can't be zero in any word. Also,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 19
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

there must be a one-to-one
mapping between digits and
letters. e.g. if you substitute 3
for the letter M, no other letter
can be 3 and all other M in the
puzzle must be

Answer

**C=0, U=1, S=2, T=3, O=4,
M=5, I=6, Z=7, E=8, D=9**

It is obvious that U=1 (as
 $U \times \text{STEM} = \text{STEM}$) and C=0 (as
 $I - C = I$).

$S \times O$ is a single digit and also
 $S \times T$ is a single digit. Hence,
their values (O, S, T) must be
2, 3 or 4 (as they can not be 0
or 1 or greater than 4).

Consider, $\text{STEM} \times O = \text{DMOC}$,
where C=0. It means that M
must be 5. Now, its simple.
O=4, S=2, T=3, E=8, Z=7, I=6
and D=9.

```

                                O U
T
4 1 3
-----
-
-----

```

```

      S T E M | D E M I S
E           2 3 8 5 | 9 8
5 6 2 8

```

```

                                | D M O C
| 9 5 4 0
-----
-
-----

```

```

                                T U I S
3 1 6 2

```

```

                                S T E M
2 3 8 5
-----
-
-----

```

```

                                Z Z Z
E
7 7 7 8

```

Z U M

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 20
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

M
 7 1 5 5

 - - - - -
 - - - - -

I S
 T
 6 2 3
 Also, when arranged from 0 to
 9, it spells **CUSTOMIZED**.

At what time after 4.00 p.m. is
 the minutes hand of a clock
 exactly aligned with the hour
 hand?

Answer
4:21:49.5

Assume that X minutes after
 4.00 PM minute hand exactly
 aligns with and hour hand.

For every minute, minute hand
 travels 6 degrees.
 Hence, for X minutes it will
 travel $6 * X$ degrees.

For every minute, hour hand

travels $1/2$ degrees.
 Hence, for X minutes it will
 travel $X/2$ degrees.

At 4.00 PM, the angle between
 minute hand and hour hand is
 120 degrees. Also, after X
 minutes, minute hand and hour
 hand are exactly aligned. So
 the angle with respect to 12 i.e.
 Vertical Plane will be same.
 Therefore,

$$\begin{aligned} 6 * X &= 120 + X/2 \\ 12 * X &= 240 + X \\ 11 * X &= 240 \\ X &= 21.8182 \\ X &= 21 \text{ minutes } 49.5 \text{ seconds} \end{aligned}$$

Hence, at 4:21:49.5 minute
 hand is exactly aligned with the
 hour hand.

A soldier looses his way in a
 thick jungle. At random he
 walks from his camp but
 mathematically in an interesting
 fashion.

First he walks one mile East
 then half mile to North. Then
 $1/4$ mile to West, then $1/8$ mile
 to South and so on making a

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 21
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

loop.

Finally how far he is from his
 camp and in which direction?

Answer

**The soldier is 0.8944 miles
 away from his camp towards
 East-North.**

It is obvious that he is in East-
 North direction.

Distance travelled in North and
 South directions
 $= 1/2 - 1/8 + 1/32 - 1/128 +$
 $1/512 - 1/2048 +$ and so on... (a
 geometric series with $r = (-1/4)$)

$$\frac{(1/2) * (1 - (-1/4)^n)}{(1 - (-1/4))}$$

$$= 1 / (2 * (1 - (-1/4)))$$

$$= 2/5$$

Similarly in East and West
 directions

$= 1 - 1/4 + 1/16 - 1/64 + 1/256 -$
 and so on... (a geometric series
 with $r = (-1/4)$)

$$\frac{(1) * (1 - (-1/4)^n)}{(1 - (-1/4))}$$

$$= 1 / (1 - (-1/4))$$

$$= 4/5$$

So the soldier is 4/5 miles away
 towards East and 2/5 miles
 away towards North. So using
 right angled triangle, soldier is
 0.8944 miles away from his
 camp.

Raj has a jewel chest
 containing Rings, Pins and Ear-
 rings. The chest contains 26
 pieces. Raj has 2 1/2 times as
 many rings as pins, and the
 number of pairs of earrings is 4
 less than the number of rings.

How many earrings does Raj
 have?

Answer

12 earrings

Assume that there are R rings,
 P pins and E pair of ear-rings.

It is given that, he has 2 1/2

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

times as many rings as pins.
 $R = (5/2) * P$ or $P = (2*R)/5$

And, the number of pairs of
earrings is 4 less than the
number of rings.
 $E = R - 4$ or $R = E + 4$

Also, there are total 26 pieces.
 $R + P + 2*E = 26$
 $R + (2*R)/5 + 2*E = 26$
 $5*R + 2*R + 10*E = 130$
 $7*R + 10*E = 130$
 $7*(E + 4) + 10*E = 130$
 $7*E + 28 + 10*E = 130$
 $17*E = 102$
 $E = 6$

Hence, there are 6 pairs of Ear-
rings i.e. total 12 Ear-rings
How many ways are there of
arranging the sixteen black or
white pieces of a standard
international chess set on the
first two rows of the board?

Given that each pawn is
identical and each rook, knight
and bishop is identical to its
pair.

Submitted

Answer

6,48,64,800 ways

There are total 16 pieces which
can be arranged on 16 places
in ${}^{16}P_{16} = 16!$ ways.
 $(16! = 16 * 15 * 14 * 13 * 12 * \dots * 3 * 2 * 1)$

But, there are some duplicate
combinations because of
identical pieces.

- There are 8 identical
pawn, which can be
arranged in ${}^8P_8 = 8!$ ways.
- Similarly there are 2
identical rooks, 2 identical
knights and 2 identical
bishops. Each can be
arranged in ${}^2P_2 = 2!$ ways.

Hence, the require answer is
 $= (16!) / (8! * 2! * 2! * 2!)$
 $= 6,48,64,800$

A person with some money
spends 1/3 for cloths, 1/5 of the
remaining for food and 1/4 of
the remaining for travel. He is
left with Rs 100/-

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 23
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

How much did he have with him
in the begining?

Answer

Rs. 250/-

Assume that initially he had Rs.
X

He spent $\frac{1}{3}$ for cloths =. $(\frac{1}{3}) * X$
* X

Remaining money = $(\frac{2}{3}) * X$

He spent $\frac{1}{5}$ of remaining
money for food = $(\frac{1}{5}) * (\frac{2}{3}) * X$
 $X = (\frac{2}{15}) * X$

Remaining money = $(\frac{2}{3}) * X -$
 $(\frac{2}{15}) * X = (\frac{8}{15}) * X$

Again, he spent $\frac{1}{4}$ of
remaining maoney for travel =
 $(\frac{1}{4}) * (\frac{8}{15}) * X = (\frac{2}{15}) * X$
Remaining money = $(\frac{8}{15}) * X -$
 $(\frac{2}{15}) * X = (\frac{6}{15}) * X$

But after spending for travel he
is left with Rs. 100/- So
 $(\frac{6}{15}) * X = 100$
 $X = 250$

Grass in lawn grows equally
thick and in a uniform rate. It

takes 24 days for 70 cows and
60 days for 30 cows to eat the
whole of the grass.

How many cows are needed to
eat the grass in 96 days?

Answer

20 cows

g - grass at the beginning
r - rate at which grass grows,
per day

y - rate at which one cow eats
grass, per day

n - no of cows to eat the grass
in 96 days

From given data,
 $g + 24*r = 70 * 24 * y$ ----- A
 $g + 60*r = 30 * 60 * y$ ----- B
 $g + 96*r = n * 96 * y$ ----- C

Solving for (B-A),
 $(60 * r) - (24 * r) = (30 * 60 * y) -$
 $(70 * 24 * y)$
 $36 * r = 120 * y$ ----- D

Solving for (C-B),
 $(96 * r) - (60 * r) = (n * 96 * y) -$
 $(30 * 60 * y)$
 $36 * r = (n * 96 - 30 * 60) * y$
 $120 * y = (n * 96 - 30 * 60) * y$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 24
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

[From D]

$$120 = (n * 96 - 1800)$$

$$n = 20$$

Hence, 20 cows are needed to eat the grass in 96 days.

There is a safe with a 5 digit number as the key. The 4th digit is 4 greater than the second digit, while the 3rd digit is 3 less than the 2nd digit. The 1st digit is thrice the last digit. There are 3 pairs whose sum is 11.

Find the number.

Answer

65292

As per given conditions, there are three possible combinations for 2nd, 3rd and 4th digits. They are (3, 0, 7) or (4, 1, 8) or (5, 2, 9)

It is given that there are 3 pairs whose sum is 11. All possible pairs are (2, 9), (3, 8), (4, 7), (5, 6). Now required number is 5 digit number and it contains 3 pairs of 11. So it must not be having 0 and 1 in it. Hence, the

only possible combination for 2nd, 3rd and 4th digits is (5, 2, 9)

Also, 1st digit is thrice the last digit. The possible combinations are (3, 1), (6, 2) and (9, 3), out of which only (6, 2) with (5, 2, 9) gives 3 pairs of 11. Hence, the answer is 65292.

Four friends - Arjan, Bhuvan, Guran and Lakha were comparing the number of sheep that they owned.

It was found that Guran had ten more sheep than Lakha.

If Arjan gave one-third to Bhuvan, and Bhuvan gave a quarter of what he then held to Guran, who then passed on a fifth of his holding to Lakha, they would all have an equal number of sheep.

How many sheep did each of them possess? Give the minimal possible answer

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 25
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

	Arjan	Bhuvan	Guran	Lakha
Initially	A	B	G	L
Arjan gave 1/3 to Bhuvan	2A/3	A/3+B	G	L
Bhuvan gave 1/4 to Guran	2A/3	A/4+3B/4	A/12+B/4+G	L
Guran gave 1/5 to Lakha	2A/3	A/4+3B/4	A/15+B/5+4G/5	A/60+B/20+G/5+L

Arjan, Bhuvan, Guran and Lakha had 90, 50, 55 and 45 sheep respectively.

Assume that Arjan, Bhuvan, Guran and Lakha had A, B, G and L sheep respectively. As it is given that at the end each would have an equal number of sheep, comparing the final numbers from the above table.

Arjan's sheep = Bhuvan's sheep

$$2A/3 = A/4 + 3B/4$$

$$8A = 3A + 9B$$

$$5A = 9B$$

Arjan's sheep = Guran's sheep

$$2A/3 = A/15 + B/5 + 4G/5$$

$$2A/3 = A/15 + A/9 + 4G/5 \text{ (as } B=5A/9)$$

$$30A = 3A + 5A + 36G$$

$$22A = 36G$$

$$11A = 18G$$

Arjan's sheep = Lakha's sheep

$$2A/3 = A/60 + B/20 + G/5 + L$$

$$2A/3 = A/60 + A/36 + 11A/90 + L \text{ (as } B=5A/9 \text{ and } G=11A/18)$$

$$2A/3 = A/6 + L$$

$$A/2 = L$$

$$A = 2L$$

Also, it is given that Guran had ten more sheep than Lakha.

$$G = L + 10$$

$$11A/18 = A/2 + 10$$

$$A/9 = 10$$

$$A = 90 \text{ sheep}$$

Thus, Arjan had 90 sheep, Bhuvan had $5A/9$ i.e. 50 sheep, Guran had $11A/18$ i.e. 55 sheep and Lakha had $A/2$ i.e. 45 sheep.

Consider a number 235, where last digit is the sum of first two digits i.e. $2 + 3 = 5$.

How many such 3-digit numbers are there?

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 26
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

There are 45 different 3-digit numbers.

The last digit can not be 0.

If the last digit is 1, the only possible number is 101. (Note that 011 is not a 3-digit number)

If the last digit is 2, the possible numbers are 202 and 112.

If the last digit is 3, the possible numbers are 303, 213 and 123.

If the last digit is 4, the possible numbers are 404, 314, 224 and 134.

If the last digit is 5, the possible numbers are 505, 415, 325, 235 and 145.

Note the pattern here - If the last digit is 1, there is only one number. If the last digit is 2, there are two numbers. If the last digit is 3, there are three numbers. If the last digit is 4, there are four numbers. If the last digit is 5, there are five numbers. And so on.....

Thus, total numbers are
 $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9$
 $= 45$

Altogether then, there are 45 different 3-digit numbers, where last digit is the sum of first two digits.

Find the smallest number such that if its rightmost digit is placed at its left end, the new number so formed is precisely 50% larger than the original number.

Answer

The answer is **285714**.

If its rightmost digit is placed at its left end, then new number is 428571 which is 50% larger than the original number 285714.

The simplest way is to write a small program. And the other way is trial and error !!!

Two identical pack of cards A and B are shuffled thoroughly. One card is picked from A and shuffled with B. The top card from pack A is turned up. If this

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 27
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

is the Queen of Hearts, what
are the chances that the top
card in B will be the King of
Hearts?

Answer

52 / 2703

There are two cases to be
considered.

CASE 1 : King of Hearts is
drawn from Pack A and
shuffled with Pack B

Probability of drawing King of
Hearts from Pack A = $1/51$ (as
Queen of Hearts is not to be
drawn)

Probability of having King of
Hearts on the top of the Pack B
= $2/53$

So total probability of case 1 =
 $(1/51) * (2/53) = 2 / (51 * 53)$

CASE 2 : King of Hearts is not
drawn from Pack A

Probability of not drawing King
of Hearts from Pack A = $50/51$
(as Queen of Hearts is not to

be drawn)

Probability of having King of
Hearts on the top of the Pack B
= $1/53$

So total probability of case 2 =
 $(50/51) * (1/53) = 50 / (51 * 53)$

Now adding both the
probability, the required
probability is
= $2 / (51 * 53) + 50 / (51 * 53)$
= $52 / (51 * 53)$
= $52 / 2703$
= 0.0192378

There are 3 ants at 3 corners of
a triangle, they randomly start
moving towards another corner.

What is the probability that they
don't collide?

Answer

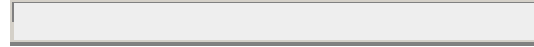
Let's mark the corners of the
triangle as A,B,C. There are
total 8 ways in which ants can
move.

1. A->B, B->C, C->A
2. A->B, B->C, C->B
3. A->B, B->A, C->A
4. A->B, B->A, C->B

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 28
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

5. $A \rightarrow C, C \rightarrow B, B \rightarrow A$
6. $A \rightarrow C, C \rightarrow B, B \rightarrow C$
7. $A \rightarrow C, C \rightarrow A, B \rightarrow A$
8. $A \rightarrow C, C \rightarrow A, B \rightarrow C$



Out of which, there are only two
 cases under which the ants
 won't collide :

- $A \rightarrow B, B \rightarrow C, C \rightarrow A$
- $A \rightarrow C, C \rightarrow B, B \rightarrow A$

Find all sets of consecutive
 integers that add up to 1000.

*Submitted by : James
 Barberousse*

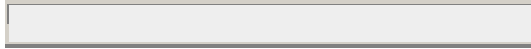
Answer

There are total 8 such series:

1. Sum of 2000 numbers
 starting from -999 i.e.
 summation of numbers
 from -999 to 1000.
 $(-999) + (-998) + (-997)$
 $+ \dots + (-1) + 0 + 1 + 2$
 $+ \dots + 997 + 998 +$
 $999 + 1000 = 1000$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 29
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com



Answer

**The maximum number of
attempts required are
16,22,400**

There are 52 possible letters - a to z and A to Z, and 10 possible numbers - 0 to 9. Now, 4 characters - 2 letters and 2 numbers, can be selected in $52 \times 52 \times 10 \times 10$ ways. These 4 characters can be arranged in 4C_2 i.e. 6 different ways - the number of unique patterns that can be formed by lining up 4 objects of which 2 are distinguished one way (i.e. they must be letters) and the other 2 are distinguished another way (i.e. they must be numbers).

Consider an example : Let's assume that @ represents letter and # represents number. the 6 possible ways of arranging them are : @@##, @#@#, @###, #@@#, #@#@, ##@@

Hence, the required answer is
 $= 52 \times 52 \times 10 \times 10 \times 6$
 $= 16,22,400$ attempts

There is a 4-character code, with 2 of them being letters and the other 2 being numbers.

How many maximum attempts would be necessary to find the correct code? Note that the code is case-sensitive.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 30
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

= 1.6 million approx.

Thanks to Tim Sanders for
opening BrainVista's brain !!!
How many possible
combinations are there in a
3x3x3 rubics cube?

In other words, if you wanted to
solve the rubics cube by trying
different combinations, how
many might it take you (worst
case senerio)?

How many for a 4x4x4 cube?
Submitted

Answer

**There are 4.3252×10^{19}
possible combinations for
3x3x3 Rubics and $7.4012 \times$
 10^{45} possible combinations
for 4x4x4 Rubics.**

Let's consider 3x3x3 Rubics
first.

There are 8 corner cubes,
which can be arranged in 8!
ways.
Each of these 8 cubes can be

turned in 3 different directions,
so there are 3^8 orientations
altogether. But if you get all but
one of the corner cube into
chosen positions and
orientations, only one of 3
orientations of the final corner
cube is possible. Thus, total
ways corner cubes can be
placed = $(8!) \times (3^8)/8 = (8!) \times$
 (3^7)

Similarly, 12 edge cubes can
be arranged in 12! ways.
Each of these 12 cubes can be
turned in 2 different directions,
so there are 2^{12} orientations
altogether. But if you get all but
one of the edge cube into
chosen positions and
orientations, only one of 2
orientations of the final edge
cube is possible. Thus, total
ways edge cubes can be
placed = $(12!) \times (2^{12})/2 = (12!) \times$
 (2^{11})

Here, we have essentially
pulled the cubes apart and
stuck cubes back in place
wherever we please. In reality,
we can only move cubes
around by turning the faces of

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 31
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

the cubes. It turns out that you can't turn the faces in such a way as to switch the positions of two cubes while returning all the others to their original positions. Thus if you get all but two cubes in place, there is only one attainable choice for them (not 2!). Hence, we must divide by 2.

Total different possible combinations are

$$= [(8!) * (3^7)] * [(12!) * (2^{11})] / 2$$
$$= (8!) * (3^7) * (12!) * (2^{10})$$
$$= 4.3252 * 10^{19}$$

Similarly, for 4x4x4 Rubics total different possible combinations are

$$= [(8!) * (3^7)] * [(24!)] * [(24!) / (4!^6)] / 24$$
$$= 7.4011968 * 10^{45}$$

Note that there are 24 edge cubes, which you can not turn in 2 orientations (hence no $2^{24} / 2$). Also, there are 4 center cubes per face i.e. $(24!) / (4!^6)$. You can switch 2 cubes without affecting the rest of the

combination as $4 \times 4 \times 4$ has even dimensions (hence no division by 2). But pattern on one side is rotated in 4 directions over 6 faces, hence divide by 24. Substitute digits for the letters to make the following relation true.

$$\begin{array}{c}
 \text{E} \quad \text{R} \\
 \\
 \text{V} \quad \text{E} \\
 \\
 \text{M} \quad \text{E}
 \end{array}
 +
 \begin{array}{c}
 \text{N} \quad \text{E} \quad \text{V} \\
 \\
 \text{L} \quad \text{E} \quad \text{A}
 \end{array}$$

A L O

N E

Note that the leftmost letter can't be zero in any word. Also, there must be a one-to-one mapping between digits and letters. e.g. if you substitute 3 for the letter M, no other letter can be 3 and all other M in the puzzle must be 3.

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 32
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

A tough one!!!

Since $R + E + E = 10 + E$, it is
clear that $R + E = 10$ and
neither R nor E is equal to 0 or
5. This is the only entry point to

solve it. Now use trial-n-error
method.

$$\begin{array}{r}
 \begin{array}{cccccc}
 & N & E & V & E & R \\
 2 & 1 & 4 & 1 & 9 & \\
 \\
 & L & E & A & V & E \\
 3 & 1 & 5 & 4 & 1 & \\
 \\
 & & & & M & E \\
 + & & & & 6 & 1 \\
 + & & & & & \\
 \hline
 \hline
 \\
 \\
 \begin{array}{cccccc}
 & A & L & O & N & E \\
 5 & 3 & 0 & 2 & 1 &
 \end{array}
 \end{array}$$

One of the four people - Mr.
Clinton, his wife Monika, their
son Mandy and their daughter
Cindy - is a singer and another
is a dancer. Mr. Clinton is older
than his wife and Mady is older
than his sister.

1. If the singer and the dancer are the same sex, then the dancer is older than the singer.
2. If neither the singer nor the dancer is the parent of the other, then the singer is older than the dancer.
3. If the singer is a man, then the singer and the dancer are the same age.
4. If the singer and the dancer are of opposite sex then the man is older than the woman.
5. If the dancer is a woman, then the dancer is older than the singer.

Whose occupation do you know? And what is his/her occupation?

Answer

Cindy is the Singer. Mr. Clinton or Monika is the Dancer.

From (1) and (3), the singer and the dancer, both can not be a man. From (3) and (4), if the singer is a man, then the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 33
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

dancer must be a man. Hence,
the singer must be a woman.

CASE I : Singer is a woman
and Dancer is also a woman
Then, the dancer is Monika and
the singer is Cindy.

CASE II : Singer is a woman
and Dancer is also a man
Then, the dancer is Mr. Clinton
and the singer is Cindy.

In both the cases, we know that
Cindy is the Singer. And either
Mr. Clinton or Monika is the
Dancer.
There are 20 people in your
applicant pool, including 5 pairs
of identical twins.

If you hire 5 people randomly,
what are the chances you will
hire at least 1 pair of identical
twins? (Needless to say, this
could cause trouble ;))

Submitted

Answer

**The probability to hire 5
people with at least 1 pair of
identical twins is 25.28%**

5 people from the 20 people
can be hired in $20C5 = 15504$
ways.

Now, divide 20 people into two
groups of 10 people each :
G1 - with all twins
G2 - with all people other than
twins

Let's find out all possible ways
to hire 5 people without a single
pair of identical twins.

Peop le from G1	Peop le from G2	No of ways to hire G1 withou t a single pair of identi cal twins	No of wa ys to hire G2	Tot al way s
0	5	$10C0$	$10C5$	252
1	4	$10C1$	$10C4$	2100
2	3	$10C2 * 8/9$	$10C3$	4800

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 34
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

3	2	10C3 * 8/9 * 6/8	10C 2	360 0
4	1	10C4 * 8/9 * 6/8 * 4/7	10C 1	800
5	0	10C5 * 8/9 * 6/8 * 4/7 * 2/6	10C 0	32
Total				115 84

Thus, total possible ways to
hire 5 people without a single
pair of identical twins = 11584
ways

So, total possible ways to hire 5
people with at least a single
pair of identical twins = 15504
- 11584 = 3920 ways

Hence, the probability to hire 5
people with at least a single
pair of identical twins
= 3920/15504
= 245/969

$$= 0.2528$$

$$= 25.28\%$$

In a hotel, rooms are numbered
from 101 to 550. A room is
chosen at random. What is the
probability that room number
starts with 1, 2 or 3 and ends
with 4, 5 or 6?

Answer

There are total 450 rooms.

Out of which 299 room number
starts with either 1, 2 or 3. (as
room number 100 is not there)
Now out of those 299 rooms
only 90 room numbers end with
4, 5 or 6

So the probability is 90/450 i.e.
1/5 or 0.20

Draw 9 dots on a page, in the
shape of three rows of three
dots to form a square. Now
place your pen on the page,
draw 4 straight lines and try
and cover all the dots.

You're not allowed to lift your
pen.

Note: Don't be confined by the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 35
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

dimensions of the square.

Submitted

There are 3 persons X, Y and Z. On some day, X lent tractors to Y and Z as many as they had. After a month Y gave as many tractors to X and Z as many as they have. After a month Z did the same thing. At the end of this transaction each one of them had 24.

Find the tractors each originally had?

Answer

One way to solve it is by making 3 equations and solve them simultaneously. But there is rather easier way to solve it using Backtracing.

It's given that at the end, each had 24 tractors (24, 24, 24) i.e. after Z gave tractors to X & Y as many as they had. It means that after getting tractors from Z

their tractors got doubled. So before Z gave them tractors, they had 12 tractors each and Z had 48 tractors. (12, 12, 48)

Similarly, before Y gave tractors to X & Z, they had 6 & 24 tractors respectively and Y had 42 tractors i.e. (6, 42, 24)

Again, before X gave tractors to Y & Z, they had 21 & 12 tractors respectively and X had 39 tractors i.e. (39, 21, 12)

Hence, initially **X had 39 tractors, Y had 21 tractors and Z had 12 tractors.**

There is a 50m long army platoon marching ahead. The last person in the platoon wants to give a letter to the first person leading the platoon. So while the platoon is marching he runs ahead, reaches the first person and hands over the letter to him and without stopping he runs and comes back to his original position.

In the mean time the whole platoon has moved ahead by

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 36
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

50m.

The question is how much distance did the last person cover in that time. Assuming that he ran the whole distance with uniform speed.

Submitted

Answer

The last person covered 120.71 meters.

It is given that the platoon and the last person moved with uniform speed. Also, they both moved for the identical amount of time. Hence, the ratio of the distance they covered - while person moving forward and backward - are equal.

Let's assume that when the last person reached the first person, the platoon moved X meters forward.

Thus, while moving forward the last person moved (50+X) meters whereas the platoon moved X meters.

Similarly, while moving back the last person moved [50-(50-X)] X meters whereas the platoon moved (50-X) meters.

Now, as the ratios are equal,
 $(50+X)/X = X/(50-X)$
 $(50+X)*(50-X) = X*X$

Solving, X=35.355 meters

Thus, total distance covered by the last person
 $= (50+X) + X$
 $= 2*X + 50$
 $= 2*(35.355) + 50$
 $= 120.71$ meters

Note that at first glance, one might think that the total distance covered by the last person is 100 meters, as he ran the total length of the platoon (50 meters) twice. TRUE, but that's the relative distance covered by the last person i.e. assuming that the platoon is stationary.

Assume that you have enough coins of 1, 5, 10, 25 and 50 cents.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 37
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

How many ways are there to
make change for a dollar? Do
explain your answer.

Amount	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
Coin																					
.01	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
.05	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
.10	1	2	4	6	9	12	16	20	25	30	36	42	49	56	64	72	81	90	100	110	121
.25	1	2	4	6	9	13	18	24	31	39	49	60	73	87	103	121	141	163	187	213	242
.50	1	2	4	6	9	13	18	24	31	39	49	62	77	93	112	134	159	187	218	252	292

**There are 292 ways to make
change for a dollar using
coins of 1, 5, 10, 25 and 50
cents.**

Let's generalised the teaser
and make a table as shown
above.

If you wish to make change for
75 cents using only 1, 5, 10 and
25 cent coins, go to the .25 row
and the 75 column to obtain
121 ways to do this.

The table can be created from
left-to-right and top-to-bottom.
Start with the top left i.e. 1 cent
row. There is exactly one way
to make change for every
amount. Then calculate the 5
cents row by adding the
number of ways to make
change for the amount using 1

cent coins plus the number of
ways to make change for 5
cents less using 1 and 5 cent
coins.

Let's take an example:

To get change for 50 cents
using 1, 5 and 10 cent coins.

* 50 cents change using 1 and
5 cent coins = 11 ways

* (50-10) 40 cents change
using 1, 5 and 10 cent coins =
25 ways

* 50 cents change using 1, 5
and 10 cent coins = 11+25 = 36
ways

Let's take another example:

To get change for 75 cents
using all coins up to 50 cent i.e.
1, 5, 10, 25 and 50 cents coins.

* 75 cents change using coins
upto 25 cent = 121 ways

* (75-50) 25 cents change
using coins upto 50 cent = 13
ways

* 75 cents change using coins
upto 50 cent = 121+13 = 134
ways

For people who don't want to
tease their brain and love to do
computer programming, there

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 38
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

is a simple way. Write a small
multi-loop program to solve the
equation: $A + 5B + 10C + 25D$
 $+ 50E = 100$

where,

$A = 0$ to 100

$B = 0$ to 20

$C = 0$ to 10

$D = 0$ to 4

$E = 0$ to 2

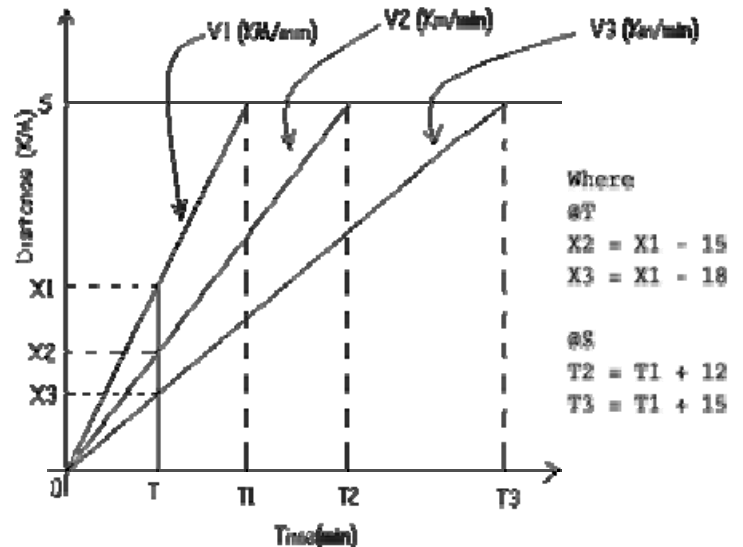
The program should output all
the possible values of A, B, C,
D and E for which the equation
is satisfied.

In a Road Race, one of the
three bikers was doing 15km
less than the first and 3km
more than the third. He also
finished the race 12 minutes
after the first and 3 minutes
before the third.

Can you find out the speed of
each biker, the time taken by
each biker to finish the race
and the length of the course?

Assume that there were no
stops in the race and also they
were driving with constant
speeds through out the

Answer



Let us assume that
Speed of First biker = V_1
km/min
Speed of Second biker = V_2
km/min
Speed of Third biker = V_3
km/min
Total time take by first biker =
 T_1 min
Total distance = S km

Now as per the data given in
the teaser, at a time T min

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 39
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$\begin{aligned} X1 &= V1 * T \\ \text{----> } 1 \end{aligned}$$

$$\begin{aligned} X1 - 15 &= V2 * T \\ \text{----> } 2 \end{aligned}$$

$$\begin{aligned} X1 - 18 &= V3 * T \\ \text{----> } 3 \end{aligned}$$

At a Distance S Km.

$$\begin{aligned} S &= V1 * T1 \\ \text{----> } 4 \end{aligned}$$

$$\begin{aligned} S &= V2 * (T1 + 12) \\ \text{----> } 5 \end{aligned}$$

$$\begin{aligned} S &= V3 * (T1 + 15) \\ \text{----> } 6 \end{aligned}$$

Thus there are 6 equations and
7 unknown data that means it
has infinite number of solutions.

By solving above 6 equations
we get,

Time taken by first biker, T1 =
60 Min.

Time taken by Second biker, T2
= 72 Min.

Time taken by first biker, T3 =
75 Min.

Also, we get

Speed of first biker, V1 = 90/T
km/min

Speed of second biker, V2 =
(5/6)V1 = 75/T km/min

Speed of third biker, V3 =
(4/5)V1 = 72/T km/min

Also, the length of the course,
S = 5400/T km

Thus, for the data given, only
the time taken by each biker
can be found i.e. 60, 72 and 75
minutes. For other quantities,
one more independent datum is
required i.e. either T or V1 or
V2 or V3

Thanks to Theertham Srinivas
for the answer !!!

What is the four-digit number in
which the first digit is 1/3 of the
second, the third is the sum of
the first and second, and the
last is three times the second?

Answer

The 4 digit number is 1349.

It is given that the first digit is
1/3 of the second. There are 3
such possibilities.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 40
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

1. 1 and 3
2. 2 and 6
3. 3 and 9

Now, the third digit is the sum
of the first and second digits.

1. $1 + 3 = 4$
2. $2 + 6 = 8$
3. $3 + 9 = 12$

It is clear that option 3 is not
possible. So we are left with
only two options. Also, the last
digit is three times the second,
which rules out the second
option. Hence, the answer is
1349.

Difference between Bholu's and
Molu's age is 2 years and the
difference between Molu's and
Kolu's age is 5 years.

What is the maximum possible
value of the sum of the
difference in their ages, taken
two at a time?

Answer

**The maximum possible value
of the sum of the difference
in their ages - taken two at a**

time - is 14 years.

It is given that -

"Difference between Bholu's
and Molu's age is 2 years"

"Difference between Molu's and
Kolu's age is 5 years"

Now, to get the maximum
possible value, the difference
between Bholu's and Kolu's
age should be maximum i.e.
Molu's age should be in
between Bholu's and Kolu's
age. Then, the difference
between Bholu's and Kolu's
age is 7 years.

Hence, the maximum possible
value of the sum of the
difference in their ages - taken
two at a time - is $(2 + 5 + 7)$ 14
years.

If it is given that:

$$25 - 2 = 3$$

$$100 \times 2 = 20$$

$$36 / 3 = 2$$

What is $144 - 3 = ?$

Submitted

Answer

There are 3 possible answers

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 41
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

to it.

Answer 1 : 9

Simply replace the first number
by its square root.

$$(25) 5 - 2 = 3$$

$$(100) 10 \times 2 = 20$$

$$(36) 6 / 3 = 2$$

$$(144) 12 - 3 = 9$$

Answer 2 : 11

Drop the digit in the tens
position from the first number.

$$(2) 5 - 2 = 3$$

$$1 (0) 0 \times 2 = 20$$

$$(3) 6 / 3 = 2$$

$$1 (4) 4 - 3 = 11$$

You will get the same answer
on removing left and right digit
alternatively from the first
number i.e remove left digit
from first (2), right digit from
second (0), left digit from third
(3) and right digit from forth (4).

$$(2) 5 - 2 = 3$$

$$10 (0) \times 2 = 20$$

$$(3) 6 / 3 = 2$$

$$14 (4) - 3 = 11$$

Answer 3 : 14

Drop left and right digit
alternatively from the actual

answer.

$$25 - 2 = (2) 3 \text{ (drop left digit i.e. 2)}$$

$$100 \times 2 = 20 (0) \text{ (drop right digit i.e. 0)}$$

$$36 / 3 = (1) 2 \text{ (drop left digit i.e. 1)}$$

$$144 - 3 = 14 (1) \text{ (drop right digit i.e. 1)}$$

A 3 digit number is such that it's
unit digit is equal to the product
of the other two digits which are
prime. Also, the difference
between it's reverse and itself is
396.

What is the sum of the three
digits?

Answer

**The required number is 236
and the sum is 11.**

It is given that the first two
digits of the required number
are prime numbers i.e. 2, 3, 5
or 7. Note that 1 is neither
prime nor composite. Also, the
third digit is the multiplication of
the first two digits. Thus, first

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 42
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

two digits must be either 2 or 3
i.e. 22, 23, 32 or 33 which
means that there are four
possible numbers - 224, 236,
326 and 339.

Now, it is also given that - the
difference between it's reverse
and itself is 396. Only 236
satisfies this condition. Hence,
the sum of the three digits is
11.

There are 4 mugs placed
upturned on the table. Each
mug have the same number of
marbles and a statement about
the number of marbles in it. The
statements are: Two or Three,
One or Four, Three or One,
One or Two.

Only one of the statement is
correct. How many marbles are
there under each mug?

Answer

A simple one.

As it is given that only one of
the four statement is correct,
the correct number can not

appear in more than one
statement. If it appears in more
than one statement, then more
than one statement will be
correct.

Hence, there are 4 marbles
under each mug.
At University of Probability,
there are 375 freshmen, 293
sophomores, 187 juniors, & 126
seniors. One student will
randomly be chosen to receive
an award.

What percent chance is there
that it will be a junior? Round to
the nearest whole percent

Answer

19%

This puzzle is easy. Divide the
number of juniors (187) by the
total number of students (981),
& then multiply the number by
100 to convert to a percentage.

Hence the answer is
 $(187/981)*100 = 19\%$

If you were to dial any 7 digits

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 43
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

on a telephone in random
order, what is the probability
that you will dial your own
phone number?

Assume that your telephone
number is 7-digits.

Answer

1 in 10,000,000

There are 10 digits i.e. 0-9.
First digit can be dialed in 10
ways. Second digit can be
dialed in 10 ways. Third digit
can be dialed in 10 ways. And
so on.....

Thus, 7-digit can be dialed in
 $10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$
(=10,000,000) ways. And, you
have just one telephone
number. Hence, the possibility
that you will dial your own
number is 1 in 10,000,000.

Note that 0123456 may not be
a valid 7-digit telephone
number. But while dialing in
random order, that is one of the
possible 7-digit number which
you may dial.

An anthropologist discovers an
isolated tribe whose written
alphabet contains only six
letters (call the letters A, B, C,
D, E and F). The tribe has a
taboo against using the same
letter twice in the same word.
It's never done.

If each different sequence of
letters constitutes a different
word in the language, what is
the maximum number of six-
letter words that the language
can employ?

Submitted

Answer

**The language can employ
maximum of 720 six-letter
words.**

It is a simple permutation
problem of arranging 6 letters
to get different six-letter words.
And it can be done in in 6! ways
i.e. 720 ways.

In otherwords, the first letter
can be any of the given 6
letters (A through F). Then,
whatever the first letter is, the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 44
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

second letter will always be from the remaining 5 letters (as same letter can not be used twice), and the third letter always be from the remaining 4 letters, and so on. Thus, the different possible six-letter words are $6 \times 5 \times 4 \times 3 \times 2 \times 1 = 720$

Kate, Demi, Madona, Sharon, Britney and Nicole decided to lunch together in a restaurant. The waiter led them to a round table with six chairs.

How many different ways can they seat?

Answer

There are 120 different possible seating arrangements.

Note that on a round table ABCDEF and BCDEFA is the same.

The first person can sit on any one of the seats. Now, for the second person there are 5 options, for the third person there are 4 options, for the forth

person there are 3 options, for the fifth person there are 2 options and for the last person there is just one option.

Thus, total different possible seating arrangements are
 $= 5 \times 4 \times 3 \times 2 \times 1$
 $= 120$

3 blocks are chosen randomly on a chessboard. What is the probability that they are in the same diagonal

Answer

There are total of 64 blocks on a chessboard. So 3 blocks can be chosen out of 64 in ${}^{64}C_3$ ways.
So the sample space is =
41664

There are 2 diagonal on chessboard each one having 8 blocks. Consider one of them. 3 blocks out of 8 blocks in diagonal can be chosen in 8C_3 ways.

But there are 2 such diagonals, hence favourable = $2 \times {}^8C_3 = 2 \times 56 = 112$

The require probability is

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 45
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$\begin{aligned} &= 112 / 41664 \\ &= 1 / 372 \\ &= 0.002688 \end{aligned}$$

What is the area of the triangle
ABC with A(e,p) B(2e,3p) and
C(3e,5p)?

where $p = \pi$ (3.141592654)

Answer

A tricky ONE.

Given 3 points are colinear.
Hence, it is a straight line.

Hence area of triangle is 0.

Silu and Meenu were walking
on the road.

Silu said, "I weigh 51 Kgs. How
much do you weigh?"

Meenu replied that she wouldn't
reveal her weight directly as
she is overweight. But she said,
"I weigh 29 Kgs plus half of my
weight."

How much does Meenu weigh?

Answer

Meenu weighs 58 Kgs.

It is given that Meenu weighs
29 Kgs plus half of her own
weight. It means that 29 Kgs is
the other half. So she weighs
58 Kgs.

Solving mathematically, let's
assume that her weight is X
Kgs.

$$X = 29 + X/2$$

$$2 * X = 58 + X$$

$$X = 58 \text{ Kgs}$$

Consider the sum: ABC + DEF
+ GHI = JJJ

If different letters represent
different digits, and there are no
leading zeros, what does J
represent?

Answer

The value of J must be 9.

Since there are no leading
zeros, J must be 7, 8, or 9. (JJJ

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 46
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$= ABC + DEF + GHI = 14? + 25? + 36? = 7??)$$

Now, the remainder left after dividing any number by 9 is the same as the remainder left after dividing the sum of the digits of that number by 9. Also, note that $0 + 1 + \dots + 9$ has a remainder of 0 after dividing by 9 and JJJ has a remainder of 0, 3, or 6.

The number 9 is the only number from 7, 8 and 9 that leaves a remainder of 0, 3, or 6 if you remove it from the sum $0 + 1 + \dots + 9$. Hence, it follows that J must be 9.

A man has Ten Horses and nine stables as shown here.

[] [] [] [] [] [] []
[] []

The man wants to fit Ten Horses into nine stables. How can he fit Ten horses into nine stables?

Submitted

Answer

The answer is simple. It says the man wants to fit "Ten Horses" into nine stables.

There are nine letters in the phrase "Ten Horses". So you can put one letter each in all nine stables.

[T] [E] [N] [H] [O]
[R] [S] [E] [S]

A man is at a river with a 9 gallon bucket and a 4 gallon bucket. He needs exactly 6 gallons of water.

How can he use both buckets to get exactly 6 gallons of water?

Note that he cannot estimate by dumping some of the water out of the 9 gallon bucket or the 4 gallon bucket

Answer

For the sack of explanation, let's identify 4 gallon bucket as Bucket P and 9 gallon bucket as Bucket Q.

Operation	4 gallon bucket (Bucket P)	9 gallon bucket (Bucket Q)
Initially	0	0

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Fill the bucket Q with 9 gallon water	0	9
Pour 4 gallon water from bucket Q to bucket P	4	5
Empty bucket P	0	5
Pour 4 gallon water from bucket Q to bucket P	4	1
Empty bucket P	0	1
Pour 1 gallon water from bucket Q to bucket P	1	0
Fill the bucket Q with 9 gallon water	1	9

Pour 3 gallon water from bucket Q to bucket P	4	6
---	---	---

9 gallon bucket contains 6 gallon of water, as required.

Each of the five characters in the word BRAIN has a different value between 0 and 9. Using the given grid, can you find out the value of each character?

		B	R	A	I
N	31				
		B	B	R	B
A	31				
		N	I	A	B
B	32				
		N	I	B	A
I	30				
		I	R	A	A
A	23				

37 29 25 27
29

The numbers on the extreme right represent the sum of the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 48
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

values represented by the
characters in that row. Also, the
numbers on the last row
represent the sum of the values
represented by the characters
in that column. e.g. $B + R + A +$
 $I + N = 31$ (from first row)

Answer

B=7, R=6, A=4, I=5 and N=9

Make total 10 equations - 5 for
rows and 5 for columns - and
solve them.

From Row3 and Row4,
 $N + I + A + B + B = N + I + B +$
 $A + I + 2$
 $B = I + 2$

From Row1 and Row3,
 $B + R + A + I + N = N + I + A +$
 $B + B - 1$
 $R = B - 1$

From Column2,
 $R + B + I + I + R = 29$
 $B + 2R + 2I = 29$
 $B + 2(B - 1) + 2I = 29$
 $3B + 2I = 31$
 $3(I + 2) + 2I = 31$
 $5I = 25$
 $I = 5$

Hence, $B=7$ and $R=6$

From Row2,
 $B + B + R + B + A = 31$
 $3B + R + A = 31$
 $3(7) + 6 + A = 31$
 $A = 4$

From Row1,
 $B + R + A + I + N = 31$
 $7 + 6 + 4 + 5 + N = 31$
 $N = 9$

Thus, $B=7, R=6, A=4, I=5$ and
 $N=9$

There are 9 coins. Out of which
one is odd one i.e weight is less
or more. How many iterations
of weighing are required to find
odd coin?

Answer

It is always possible to find odd
coin in 3 weighings and to tell
whether the odd coin is heavier
or lighter.

1. Take 8 coins and weigh 4
against 4.
 - o If both are not
equal, goto step 2

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 49
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- If both are equal,
goto step 3
- coin and is
lighter.
- 2. One of these 8 coins is
the odd one. Name the
coins on heavier side of
the scale as H1, H2, H3
and H4. Similarly, name
the coins on the lighter
side of the scale as L1,
L2, L3 and L4. Either one
of H's is heavier or one of
L's is lighter. Weigh (H1,
H2, L1) against (H3, H4,
X) where X is one coin
remaining in initial
weighing.
 - If both are equal,
one of L2, L3, L4 is
lighter. Weigh L2
against L3.
 - If both are
equal, L4 is
the odd coin
and is lighter.
 - If L2 is light,
L2 is the odd
coin and is
lighter.
 - If L3 is light,
L3 is the odd
 - If (H1, H2, L1) is
heavier side on the
scale, either H1 or
H2 is heavier.
Weight H1 against
H2
 - If both are
equal, there is
some error.
 - If H1 is heavy,
H1 is the odd
coin and is
heavier.
 - If H2 is heavy,
H2 is the odd
coin and is
heavier.
 - If (H3, H4, X) is
heavier side on the
scale, either H3 or
H4 is heavier or L1
is lighter. Weight H3
against H4
 - If both are
equal, L1 is

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 50
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

the odd coin
 and is lighter.

- If H3 is heavy,
 H3 is the odd
 coin and is
 heavier.
- If H4 is heavy,
 H4 is the odd
 coin and is
 heavier.

2. On the second day 2
 medals and $\frac{1}{7}$ of the
 now remaining medals
 was awarded; and so on.
3. On the n^{th} and last day,
 the remaining n medals
 were awarded.

How many days did the contest
 last, and how many medals
 were awarded altogether?

Answer

3. The remaining coin X is
 the odd one. Weigh X
 against the anyone coin
 used in initial weighing.
 - If both are equal,
 there is some error.
 - If X is heavy, X is
 the odd coin and is
 heavier.
 - If X is light, X is the
 odd coin and is
 lighter.

In a sports contest there were
 m medals awarded on n
 successive days ($n > 1$).

1. On the first day 1 medal
 and $\frac{1}{7}$ of the remaining
 $m - 1$ medals were
 awarded.

**Total 36 medals were
 awarded and the contest was
 for 6 days.**

On day 1: Medals awarded = $(1 + \frac{35}{7}) = 6$: Remaining 30
 medals

On day 2: Medals awarded = $(2 + \frac{28}{7}) = 6$: Remaining 24
 medals

On day 3: Medals awarded = $(3 + \frac{21}{7}) = 6$: Remaining 18
 medals

On day 4: Medals awarded = $(4 + \frac{14}{7}) = 6$: Remaining 12
 medals

On day 5: Medals awarded = $(5 + \frac{7}{7}) = 6$: Remaining 6 medals

On day 6: Medals awarded 6

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 51
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

I got this answer by writing
small program. If anyone know
any other simpler method, do
submit it.

A number of 9 digits has the
following properties:

- The number comprising
the leftmost two digits is
divisible by 2, that
comprising the leftmost
three digits is divisible by
3, the leftmost four by 4,
the leftmost five by 5, and
so on for the nine digits of
the number i.e. the
number formed from the
first n digits is divisible by
 n , $2 \leq n \leq 9$.
- Each digit in the number
is different i.e. no digits
are repeated.
- The digit 0 does not occur
in the number i.e. it is
comprised only of the
digits 1-9 in some order.

Find the number.

Answer

The answer is **381654729**

One way to solve it is Trial-&-
Error. You can make it bit
easier as odd positions will
always occupy ODD numbers
and even positions will always
occupy EVEN numbers. Further
5th position will contain 5 as 0
does not occur.

The other way to solve this
problem is by writing a
computer program that
systematically tries all
possibilities.

1/3 rd of the contents of a
container evaporated on the 1st
day. 3/4th of the remaining
contents of the container
evaporated on the second day.

What part of the contents of the
container is left at the end of
the second day?

Answer

Assume that contents of the
container is X

On the first day 1/3rd is
evaporated.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 52
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$(1 - 1/3)$ of X is remaining i.e.
 $(2/3)X$

On the Second day $3/4$ th is
evaporated. Hence,
 $(1 - 3/4)$ of $(2/3)X$ is remaining
i.e. $(1/4)(2/3)X = (1/6) X$

Hence $1/6$ th of the contents of
the container is remaining

There are four people in a room
(not including you). Exactly two
of these four always tell the
truth. The other two always lie.

You have to figure out who is
who IN ONLY 2 QUESTIONS.
Your questions have to be YES
or NO questions and can only
be answered by one person. (If
you ask the same question to
two different people then that
counts as two questions). Keep
in mind that all four know each
other's characteristics whether
they lie or not.

What questions would you ask
to figure out who is who?
Remember that you can ask
only 2 questions.

Submitted

You have 3 baskets, & each
one contains exactly 4 balls,
each of which is of the same
size. Each ball is either red,
black, white, or purple, & there
is one of each color in each
basket.

If you were blindfolded, & lightly
shook each basket so that the
balls would be randomly
distributed, & then took 1 ball
from each basket, what chance
is there that you would have
exactly 2 red balls?

Answer

There are 64 different possible
outcomes, & in 9 of these,
exactly 2 of the balls will be red.
There is thus a slightly better
than 14% chance $[(9/64)*100]$
that exactly 2 balls will be red.

A much faster way to solve the
problem is to look at it this way.
There are 3 scenarios where
exactly 3 balls are red:

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 53
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

1	2	3

R	R	X
R	X	R
X	R	R

X is any ball that is
not red.
There is a 4.6875% chance that
each of these situations will
occur.

Take the first one, for example:
25% chance the first ball is red,
multiplied by a 25% chance the
second ball is red, multiplied by
a 75% chance the third ball is
not red.

Because there are 3 scenarios
where this outcome occurs, you
multiply the 4.6875% chance of
any one occurring by 3, & you
get 14.0625%

Consider a state lottery where
you get to choose 8 numbers
from 1 to 80, no repetiton

allowed. The Lottery
Commission chooses 11 from
those 80 numbers, again no
repetition. You win the lottery if
atleast 7 of your numbers are
there in the 11 chosen by the
Lottery Commission.

What is the probablity of
winning the lottery?

Answer

The probability of winning the
lottery is two in one billion i.e.
only two person can win from
one billion !!!

Let's find out sample space
first. The Lottery Commission
chooses 11 numbers from the
80. Hence, the 11 numbers
from the 80 can be selected in
 ${}^{80}C_{11}$ ways which is very very
high and is equal to 1.04776×10^{13}

Now, you have to select 8
numbers from 80 which can be
selected in ${}^{80}C_8$ ways. But we
are interested in only those
numbers which are in 11
numbers selected by the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Lottery Commision. There are 2 cases.

- You might select 8 numbers which all are there in 11 numbers chosen by the Lottery Commission. So there are $^{11}C_8$ ways.
- Another case is you might select 7 lucky numbers and 1 non-lucky number from the remaining 69 numbers. There are $(^{11}C_7) * (^{69}C_1)$ ways to do that.

So total lucky ways are
 $= (^{11}C_8) + (^{11}C_7) * (^{69}C_1)$
 $= (165) + (330) * (69)$
 $= 165 + 22770$
 $= 22935$

Hence, the probability of the winning lottery is
 $= (\text{Total lucky ways}) / (\text{Total Sample space})$
 $= (22935) / (1.04776 * 10^{13})$
 $= 2.1889 * 10^{-9}$
 i.e. 2 in a billion. To move a Safe, two cylindrical steel bars 7 inches in diameter are used as rollers.

How far will the safe have moved forward when the rollers have made one revolution?

Answer

The safe must have moved 22 inches forward.

If the rollers make one revolution, the safe will move the distance equal to the circumference of the roller. Hence, the distance covered by the safe is

$= \text{PI} * \text{Diameter (or } 2 * \text{PI} * \text{Radius)}$
 $= \text{PI} * 7$
 $= 3.14159265 * 7$
 $= 21.99115$
 $= 22 \text{ inches approx.}$

Submit If a rook and a bishop of a standard chess set are randomly placed on a chessboard, what is the probability that one is attacking the other?

Note that both are different colored pieces.

Submit **Answer**

The probability of either the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 55
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Rook or the Bishop attacking the other is 0.3611

A Rook and a Bishop on a standard chess-board can be arranged in ${}^{64}P_2 = 64 \times 63 = 4032$ ways

Now, there are 2 cases - Rook attacking Bishop and Bishop attacking Rook. Note that the Rook and the Bishop never attack each other simultaneously. Let's consider both the cases one by one.

Case I - Rook attacking Bishop

The Rook can be placed in any of the given 64 positions and it always attacks 14 positions. Hence, total possible ways of the Rook attacking the Bishop = $64 \times 14 = 896$ ways

Case II - Bishop attacking Rook

View the chess-board as a 4 co-centric hollow squares with the outermost square with side 8 units and the innermost square with side 2 units.

If the bishop is in one of the outer 28 squares, then it can attack 7 positions. If the bishop is in one of the 20 squares at next inner-level, then it can attack 9 positions. Similarly if the bishop is in one of the 12 squares at next inner-level, then it can attack 11 positions. And if the bishop is in one of the 4 squares at next inner-level (the innermost level), then it can attack 13 positions.

Hence, total possible ways of the Bishop attacking the Rook = $28 \times 7 + 20 \times 9 + 12 \times 11 + 4 \times 13 = 560$ ways

Thus, the required probability is
 = $(896 + 560) / 4032$
 = $13/36$
 = 0.3611

itted ed

Here in England McDonald's has just launched a new advertising campaign. The poster shows 8 McDonald's products and underneath claims there are 40312 combinations of the above items.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 56
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Given that the maximum
number of items allowed is 8,
and you are allowed to have
less than 8 items, and that the
order of purchase does not
matter (i.e. buying a burger and
fries is the same as buying fries
and a burger)

How many possible
combinations are there? Are
McDonald's correct in claiming
there are 40312 combinations?

Answer

**Total possible combinations
are 12869.**

It is given that you can order
maximum of 8 items and you
are allowed to have less than 8
items. Also, the order of
purchase does not matter. Let's
create a table for ordering total
N items using X products.

Items Ordered (N)	Products Used (X)							
	1	2	3	4	5	6	7	8
1	1	-	-	-	-	-	-	-
2	1	1	-	-	-	-	-	-

3	1	2	1	-	-	-	-	-
4	1	3	3	1	-	-	-	-
5	1	4	6	4	1	-	-	-
6	1	5	10	10	5	1	-	-
7	1	6	15	20	15	6	1	-
8	1	7	21	35	35	21	7	1
Total (T)	8	28	56	70	56	28	8	1
Ways to choose X products from 8 products (W)	8C1	8C2	8C3	8C4	8C5	8C6	8C7	8C8
Total combinations (T*W)	64	784	3136	4960	3136	784	64	1

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 57
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Thus, total possible
 combinations are
 $= 64 + 784 + 3136 + 4900 +$
 $3136 + 784 + 64 + 1$
 $= 12869$

What are the chances that at
 least two out of a group of fifty
 people share the same
 birthday?

Submitted **Answer**

**The probability of atleast two
 out of a group of 50 people
 share the same birthday is
 97%**

Probability of atleast two share
 the same birthday = $1 -$
 probability of all 50 have
 different birthdays

Probability of all 50 have
 different birthday
 $= 365/365 * 364/365 * 363/365$
 $* ... * 317/365 * 316/365$
 $= (365 * 364 * 363 * 362 * ... *$
 $317 * 316)/365^{50}$
 $= 0.0296264$

Probability of atleast two share
 the same birthday
 $= 1 - 0.0296264$

$= 0.9703735$
 $= 97\%$ approx.

Thus, the probability of atleast
 two out of a group of 50 people
 share the same birthday is 97%

This explains **why in a
 school/college with
 classrooms of 50 students,
 there are at least two
 students with a birthday on
 the same day of the year.**

Also, if there are 23 people in
 the room, then there are 50%
 chances that atleast two of
 them have a birthday on the
 same day of the year!!!

A tank can be filled by pipe A in
 30 minutes and by pipe B in 24
 minutes. Outlet pipe C can
 empty the full tank in X
 minutes.

If the tank is empty initially and
 if all the three pipes A, B and C
 are opened simultaneously, the
 tank will NEVER be full. Give
 the maximal possible value of
 X.

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 58
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

The maximum possible value of X is 13 minutes 20 seconds.

In one minute,
pipe A can fill $\frac{1}{30}$ part of the tank.
pipe B can fill $\frac{1}{24}$ part of the tank.

Thus, the net water level increase in one minute is
 $= \frac{1}{30} + \frac{1}{24}$
 $= \frac{3}{40}$ part of the tank

In order to keep the tank always empty, outlet pipe C should empty at least $\frac{3}{40}$ part of the tank in one minute. Thus, pipe C can empty the full tank in $\frac{40}{3}$ i.e. 13 minutes 20 seconds.

A worker earns a 5% raise. A year later, the worker receives a 2.5% cut in pay, & now his salary is Rs. 22702.68

What was his salary to begin with?

Answer

Rs.22176

Assume his salary was Rs. X

He earns 5% raise. So his salary is $(105 \times X)/100$

A year later he receives 2.5% cut. So his salary is $((105 \times X)/100) \times (97.5/100)$ which is Rs. 22702.68

Hence, solving equation
 $((105 \times X)/100) \times (97.5/100) = 22702.68$
 $X = 22176$

500 men are arranged in an array of 10 rows and 50 columns according to their heights.

Tallest among each row of all are asked to come out. And the shortest among them is A.

Similarly after resuming them to their original positions, the shortest among each column are asked to come out. And the tallest among them is B.

Now who is taller A or B ?

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 59
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

What is the remainder left after
dividing $1! + 2! + 3! + \dots + 100!$
By 7?

Think carefully !!!

Answer

A tricky one.

7! onwards all terms are
divisible by 7 as 7 is one of the
factor. So there is no remainder
left for those terms i.e.
remainder left after dividing $7! + 8! + 9! + \dots + 100!$ is 0.

The only part to be consider is
 $= 1! + 2! + 3! + 4! + 5! + 6!$
 $= 1 + 2 + 6 + 24 + 120 + 720$
 $= 873$

The remainder left after dividing
873 by 7 is 5

Hence, the remainder is 5.

Imagine that you have 26
constants, labelled A through Z.
Each constant is assigned a
value in the following way: A =
1; the rest of the values equal
their position in the alphabet (B
corresponds to the second

position so it equals 2, C = 3,
etc.) raised to the power of the
preceeding constant value. So,
 $B = 2^A$ (A's value), or $B = 2^1 = 2$.
 $C = 3^2 = 9$. $D = 4^9$, etc.

Find the exact numerical value
to the following equation: $(X - A) * (X - B) * (X - C) * \dots * (X - Y) * (X - Z)$

Answer

$(X - A) * (X - B) * (X - C) * \dots * (X - Y) * (X - Z)$ equals 0 since
 $(X - X)$ is zero

If three babies are born every
second of the day, then how
many babies will be born in the
year 2001?

*Su***Answer**

9,46,08,000 babies

The total seconds in year 2001
 $= 365 \text{ days/year} * 24 \text{ hours/day} * 60 \text{ minutes/hours} * 60 \text{ seconds/minute}$
 $= 365 * 24 * 60 * 60 \text{ seconds}$
 $= 3,15,36,000 \text{ seconds}$

Thus, there are 3,15,36,000
seconds in the year 2001. Also,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 60
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

three babies born are every
second. Hence, total babies
born
= 3 * 3,15,36,000 seconds
= 9,46,08,000 *mitted*

Replace the letters with the
correct numbers.

T W O

X T W O

T H R E E

*Submitted by : Timmy
Chan*

Answer

T=1, W=3, O=8, H=9, R=2, E=4

1 3 8

x 1 3 8

1 9 0 4 4

You can reduce the number of
trials. T must be 1 as there is
multiplication of T with T in
hundred's position. Also, O can
not be 0 or 1. Now, you have to

find three digit number whose
square satisfies above
conditions and square of that
has same last two digits.
Hence, it must be between 102
and 139.

Brain Teaser No : 00052

Four words add up to a fifth
word numerically:

mars

venus

uranus

saturn

----- +

neptune

Each of the ten letters (m, a, r,
s, v, e, n, u, t, and p) represent
a unique number from the
range 0 .. 9.

Furthermore, numbers 1 and 6
are being used most frequently.


Answer

The easiest way to solve this

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 61
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

problem is by writing a
computer program
that systematically
tries all possible
mappings from the
numbers onto the letters. This
will give you only one solution
which meets the condition that
numbers 1 and 6 are most
frequently used.



$$\begin{array}{r}
 \text{mars} \\
 m = 4 \\
 \text{venus} \\
 a = 5 \\
 \text{uranus} \quad r = 9 \\
 \text{saturn} \quad s = 3 \\
 \text{-----} + \quad v = 2 \\
 4593 \\
 \text{neptune} \quad e = 0 \\
 20163 \\
 \quad n = 1 \\
 695163 \\
 \quad u = 6 \\
 358691 \\
 \quad t = 8 \\
 \text{-----} + \\
 \quad p = 7 \\
 1078610
 \end{array}$$

There are 4 army men. They
have been captured by a rebel
group and have been held at
ransom. An army intelligent
officer orders them to be

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 62
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

buried deep in dirt up to their
necks. The format of their
burial are as shown in the
figure.

Conditions

- They each have hats on their heads. either black(b) or white (w) look at diagram above. There are total 2 white hats and 2 black hats.
- They only look in front of them not behind. They are not allowed to communicate by talking.
- Between army man 1 and 2, there is a wall.
- Captive man 4 can see the colour of hats on 2 and 3
- 3 can only see 2's hat
- 2 can only see a wall and 1 can see a wall too, but is on the other side

The officer speaks up, "If one of you can correctly tell me the colour of your hat, you will all go scott free back to your contries. If you are wrong, you will all be killed.

How can one of them be certain about the hat they are wearing and not risk the lives of their fellow souldiers by taking a 50/50 guess!

Submitted

Answer

Either soldier 3 or soldier 4 can save the life as soldier 1 and soldier 2 can not see colour of any hat, even not their own.. In our case soldier 3 will tell the colour of his hat.

Soldier 4 can see the hat on soldier 2 and soldier 3. If both are white, then he can be sure about colour of his hat which will be black and vice-versa. But if one of them is white and one is black, then soldier 4 can not say anything as he can have either of them. So he will keep mum.

If soldier 4 won't say anything for a while, then soldier 3 will know that soldier 4 is not in position to tell the colour of hat on his hat. It means that colour of soldier 3's hat is opposite of

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 63
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

colour of soldier 2's hat. So
soldier 3 can tell correctly the
colour of hat on his head which
is Black.

Here, we are assuming that all
the soldiers are intelligent
enough. Also, this solution will
work for any combination of 2
Black hats and 2 White hats.
One side of the bottom layer of
a triangular pyramid has 12
balls. How many are there in
the whole pyramid?

Note that the pyramid is
equilateral and solid.

Answer

There are total 364 balls.

As there are 12 balls along one
side, it means that there are 12
layers of balls. The top most
layer has 1 ball. The second
layer has 3 (1+2) balls. The
third layer has 6 (1+2+3) balls.
The fourth layer has 10
(1+2+3+4) balls. The fifth layer
has 15 (1+2+3+4+5) balls.
Similarly, there are 21, 28, 36,
45, 55, 66 and 78 balls in the
remaining layers.

Hence, the total number of balls
are

$$\begin{aligned} &= 1 + 3 + 6 + 10 + 15 + 21 + 28 \\ &+ 36 + 45 + 55 + 66 + 78 \\ &= 364 \text{ balls} \end{aligned}$$

A blindfolded man is asked to
sit in the front of a carrom
board. The holes of the board
are shut with lids in random
order, i.e. any number of all the
four holes can be shut or open.

Now the man is supposed to
touch any two holes at a time
and can do the following.

- Open the closed hole.
- Close the open hole.
- Let the hole be as it is.

After he has done it, the carrom
board is rotated and again
brought to some position. The
man is again not aware of what
are the holes which are open or
closed.

How many minimum number of
turns does the blindfolded man
require to either open all the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 64
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

holes or close all the holes?

Note that whenever all the
holes are either open or close,
there will be an alarm so that
the blindfolded man will know
that he has won.

Submitted

Answer

**The blindfolded man requires
5 turns.**

1. Open two adjacent holes.

2. Open two diagonal holes.
Now atleast 3 holes are
open. If 4th hole is also
open, then you are done.
If not, the 4th hole is
close.

3. Check two diagonal
holes.

- If one is close, open
it and all the holes
are open.
- If both are close,
open any one hole.
Now, two holes are
open and two are
close. The diagonal
holes are in the
opposite status i.e.

in both the
diagonals, one hole
is open and one is
close.

4. Check any two adjacent
holes.

- If both are open,
close both of them.
Now, all holes are
close.
- If both are close,
open both of them.
Now, all holes are
open.
- If one is open and
one is close, invert
them i.e. close the
open hole and open
the close hole.
Now, the diagonal
holes are in the
same status i.e. two
holes in one
diagonal are open
and in other are
close.

5. Check any two diagonal
holes.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 65
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- If both are open,
close both of them.
Now, all holes are
close.
- If both are close,
open both of them.
Now, all holes are
open.

In the middle of the confounded desert, there is the lost city of "Ash". To reach it, I will have to travel overland by foot from the coast. On a trek like this, each person can only carry enough rations for five days and the farthest we can travel in one day is 30 miles. Also, the city is 120 miles from the starting point.

What I am trying to figure out is the fewest number of persons, including myself, that I will need in our Group so that I can reach the city, stay overnight, and then return to the coast without running out of supplies.

How many persons (including myself) will I need to accomplish this mission?

Answer

Total 4 persons (including you) required.

It is given that each person can only carry enough rations for five days. And there are 4 persons. Hence, total of 20 days rations is available.

1. **First Day** : 4 days of rations are used up. One person goes back using one day of rations for the return trip. The rations remaining for the further trek is for 15 days.
2. **Second Day** : The remaining three people use up 3 days of rations. One person goes back using 2 days of rations for the return trip. The rations remaining for the further trek is for 10 days.
3. **Third Day** : The remaining two people use up 2 days of rations. One person goes back using 3 days of rations for the return trip. The rations

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

remaining for the further
trek is for 5 days.

4. **Fourth Day** : The
remaining person uses up
one day of rations. He
stays overnight. The next
day he returns to the
coast using 4 days of
rations.

Thus, total 4 persons, including
you are required.

Brain Teaser No :
00015

In the town called Alibaug, the
following facts are true:

- No two inhabitants have exactly the same number of hairs.
- No inhabitants has exactly 2025 hairs.
- There are more inhabitants than there are hairs on the head of any one inhabitants.

What is the largest possible
number of the inhabitants of
Alibaug?

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 67
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Answer

2025

It is given that no inhabitants
have exactly 2025 hairs. Hence
there are 2025 inhabitants with
0 to 2024 hairs in the head.

Suppose there are more than
2025 inhabitants. But these will
violate the condition that "There
are more inhabitants than there
are hairs on the head of any
one inhabitants." As for any
number more than 2025, there
will be same number of
inhabitants as the maximum
number of hairs on the head of
any inhabitant.

There are four groups of
Mangoes, Apples and Bananas
as follows:

Group I : 1 Mango, 1 Apples
and 1 Banana

Group II : 1 Mango, 5 Apples
and 7 Bananas

Group III : 1 Mango, 7 Apples
and 10 Bananas

Group IV : 9 Mango, 23 Apples
and 30 Bananas

Group II costs Rs 300 and

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Group III costs Rs 390.

Can you tell how much does
Group I and Group IV cost?

Answer

**Group I costs Rs 120 and
Group IV costs Rs 1710**

Assume that the values of one
mango, one apple and one
banana are M, A and B
respectively.

From Group II : $M + 5A + 7B = 300$

From Group III : $M + 7A + 10B = 390$

Subtracting above two equations
: $2A + 3B = 90$

For Group I :
 $= M + A + B$
 $= (M + 5A + 7B) - (4A + 6B)$
 $= (M + 5A + 7B) - 2(2A + 3B)$
 $= 300 - 2(90)$
 $= 300 - 180$
 $= 120$

Similarly, for Group IV :
 $= 9M + 23A + 30B$
 $= 9(M + 5A + 7B) - (22A + 33B)$

$$\begin{aligned} &= 9(M + 5A + 7B) - 11(2A + 3B) \\ &= 9(300) - 11(90) \\ &= 2700 - 990 \\ &= 1710 \end{aligned}$$

Thus, Group I costs Rs 120 and
Group IV costs Rs 1710.

Tic-Tac-Toe is being played.
One 'X' has been placed in one
of the corners. No 'O' has been
placed yet.

Where does the player that is
playing 'O' has to put his first
'O' so that 'X' doesn't win?

Assume that both players are
very intelligent. Explain your
answer

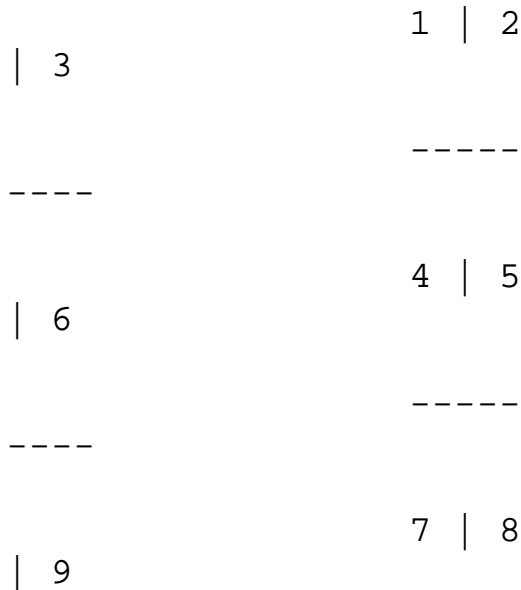
Answer

**"O" should be placed in the
center.**

Let's number the positions as:

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 68
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com



It is given that "X" is placed in one of the corner position. Let's assume that its at position 1.

Now, let's take each position one by one.

- If "O" is placed in position 2, "X" can always win by choosing position 4, 5 or 7.
- If "O" is placed in position 3, "X" can always win by choosing position 4, 7 or 9.
- If "O" is placed in position 4, "X" can always win by choosing position 2, 3 or 5.

- If "O" is placed in position 6, "X" can always win by choosing position 3, 5 or 7.
- If "O" is placed in position 7, "X" can always win by choosing position 2, 3 or 9.
- If "O" is placed in position 8, "X" can always win by choosing position 3, 5 or 7.
- If "O" is placed in position 9, "X" can always win by choosing position 3, or 7.

If "O" is placed in position 5 i.e. center position, "X" can't win unless "O" does something foolish ;))

Hence, "O" should be placed in the center.

Amit, Bhavin, Himanshu and Rakesh are sitting around a table.

- The Electronics Engineer is sitting to the left of the Mechanical Engineer.
- Amit is sitting opposite to Computer Engineer.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- Himanshu likes to play Computer Games.
- Bhavin is sitting to the right of the Chemical Engineer.

Can you figure out everyone's profession?

Answer

Amit is the Mechanical Engineer. Bhavin is the Computer Engineer. Himanshu and Rakesh are either Chemical Engineer or Electronics Engineer.

Amit and Bhavin are sitting opposite to each other. Whereas Chemical Engineer and Electronics Engineer are sitting opposite to each other.

We cannot find out who is Chemical Engineer and Electronics Engineer as data provided is not sufficient

Five friends with surname Batliwala, Pocketwala, Talawala, Chunawala and Natakawala have their first name and middle name as follow.

1. Four of them have a first and middle name of Paresh.
2. Three of them have a first and middle name of Kamlesh.
3. Two of them have a first and middle name of Naresh.
4. One of them have a first and middle name of Elesh.
5. Pocketwala and Talawala, either both are named Kamlesh or neither is named Kamlesh.
6. Either Batliwala and Pocketwala both are named Naresh or Talawala and Chunawala both are named Naresh.
7. Chunawala and Natakawala are not both named Paresh.

Who is named Elesh?

Answer

Pocketwala is named Elesh.

From (1) and (7), it is clear that Batliwala, Pocketwala and

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 70
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Talawala are named Paresh.

From (6) and (5), if Pocketwala or Talawala both are named Kamlesh, then either of them will have three names i.e. Paresh, Kamlesh and Naresh. Hence, Pocketwala and Talawala both are not named Kamlesh. It means that Batliwala, Chunawala and Natakwala are named Kamlesh.

Now it is clear that Talawala and Chunawala are named Naresh. Also, Pocketwala is named Elesh.

Mr. Wagle goes to work by a bus. One day he falls asleep when the bus still has twice as far to go as it has already gone.

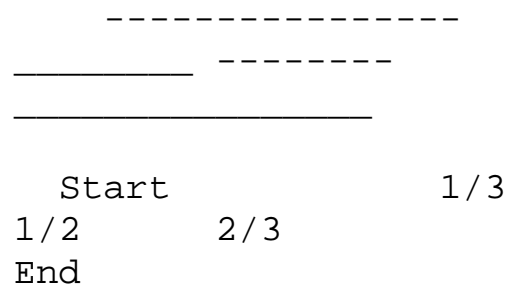
Halfway through the trip he wakes up as the bus bounces over some bad potholes. When he finally falls asleep again, the bus still has half the distance to go that it has already travelled. Fortunately, Mr. Wagle wakes up at the end of his trip.

What portion of the total trip did Mr. Wagle sleep?

Answer

Mr. wagle slept through half his trip.

Let's draw a timeline. Picture the bus route on a line shown below:



----- shows time for which Mr. Wagle was not sleeping

_____ shows time for which Mr. Wagle was sleeping

When Mr. Wagle fell asleep the first time, the bus sill had twice

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 71
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

as far to go as it had already gone, that marks the first third of his trip.

He wake up halfway through the trip i.e slept from $\frac{1}{3}$ mark to the $\frac{1}{2}$ mark. He fell sleep again when the bus still had half the distance to go that it had already traveled i.e $\frac{2}{3}$ mark.

Adding up, all sleeping times,
 $= (\frac{1}{2} - \frac{1}{3}) + (1 - \frac{2}{3})$
 $= \frac{1}{6} + \frac{1}{3}$
 $= \frac{1}{2}$

Hence, Mr. wagle slept through half his trip.

Brain Teaser No : 00068

In your sock drawer, you have a ratio of 5 pairs of blue socks,

4 pairs of brown socks, and 6 pairs of black socks.

In complete darkness, how many socks would you need to pull out to get a matching pair of the same color? 4 If you don't agree, try it yourself! You have a bucket of jelly beans. Some are red, some are blue, and some green. With your eyes closed, pick out 2 of a like color.

How many do you have to grab to be sure you have 2 of the same?

You have a bucket of jelly beans. Some are red, some are blue, and some green. With your eyes closed, pick out 2 of a like color.

How many do you have to grab to be sure you have 2 of the same?

If you select 4 Jelly beans you are guarenteed that you will have 2 that are the same color.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 72
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

There are 70 employees
working with BrainVista of
which 30 are females. Also,

- 30 employees are married
- 24 employees are above 25 years of age
- 19 married employees are above 25 years, of which 7 are males
- 12 males are above 25 years of age
- 15 males are married.

How many unmarried females are there and how many of them are above 25?

Answer

15 unmarried females & none are above 25 years of age.

Simply put all given information into the table structure and you will get the answer.

	Married		Unmarried	
	Below 25	Above 25	Below 25	Above 25
Female	3	12	15	0

Male	8	7	20	5
-------------	---	---	----	---

My friend collects antique stamps. She purchased two, but found that she needed to raise money urgently. So she sold them for Rs. 8000 each. On one she made 20% and on the other she lost 20%.

How much did she gain or lose in the entire transaction?

Answer

She lost Rs 666.67

Consider the first stamp. She makes 20% on it after selling it for Rs 8000.

So the original price of first stamp is

$$= (8000 * 100) / 80$$

$$= \text{Rs } 6666.67$$

Similarly, consider second stamp. She lost 20% on it after selling it for Rs 8000

So the original price of second stamp is

$$= (8000 * 100) / 80$$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 73
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

= Rs 10000

Total buying price of two
 stamps

= Rs 6666.67 + Rs 10000

= Rs 16666.67

Total selling price of two
 stamps

= Rs 8000 + Rs 8000

= Rs 16000

Hence, she lost Rs 666.67

Assume for a moment that the
 earth is a perfectly uniform
 sphere of radius 6400 km.
 Suppose a thread equal to the
 length of the circumference of
 the earth was placed along the
 equator, and drawn to a tight fit.

Now suppose that the length of
 the thread is increased by 12
 cm, and that it is pulled away
 uniformly in all directions.

By how many cm. will the
 thread be separated from the
 earth's surface?

Answer

The circumference of the earth
 is

= $2 * \pi * r$

= $2 * \pi * 6400 \text{ km}$

= $2 * \pi * 6400 * 1000 \text{ m}$

= $2 * \pi * 6400 * 1000 * 100 \text{ cm}$

= $1280000000 * \pi \text{ cm}$

where r = radius of the earth, π
 = 3.141592654

Hence, the length of the thread
 is = $1280000000 * \pi \text{ cm}$

Now length of the thread is
 increased by 12 cm. So the new
 length is = $(1280000000 * \pi) +$
 12 cm

This thread will make one
 concentric circle with the earth
 which is slightly away from the
 earth. The circumference of that
 circle is nothing but
 $(1280000000 * \pi) + 12 \text{ cm}$

Assume that radius of the outer
 circle is $R \text{ cm}$

Therefore,

$2 * \pi * R = (1280000000 * \pi)$
 + 12 cm

Solving above equation, $R =$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 74
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

640000001.908 cm
 Radius of the earth is $r =$
 640000000 cm

Hence, the thread will be
 separated from the earth by
 $= R - r$ cm
 $= 640000001.908 - 640000000$
 $= 1.908$ cm
 Scientist decided to do a study
 on the population growth of
 rabbits. Inside a controlled
 environment, 1000 rabbits were
 placed.

Six months later, there were
 $1000Z$ rabbits. At the beginning
 of the 3rd year, there were
 roughly $2828Z$ rabbits, which
 was 4 times what the scientists
 placed in there at the beginning
 of the 1st year.

If Z is a positive variable, how
 many rabbits would be there at
 the beginning of the 11th year?

Submi **Answer**

**At the beginning of the 11th
 year, there would be
 1,024,000 rabbits.**

At the beginning, there were

1000 rabbits. Also, there were
 4000 rabbits at the beginning of
 third year which is equal to
 $2828Z$. Thus, $Z = 4000/2828$
 i.e. 1.414 (the square root of 2)

Note that $2828Z$ can be
 represented as $2000*Z*Z$
 ($Z=1.414$), which can be further
 simplified as $1000*Z*Z*Z*Z$

Also, it is given that at the end
 of 6 months, there were $1000Z$
 rabbits.

It is clear that the population
 growth is 1.414 times every six
 months i.e. 2 times every year.
 After N years, the population
 would be $1000*(Z^{(2N)})$ i.e.
 $1000*(2^N)$

Thus, at the beginning of the
 11th year (i.e. after 10 years),
 there would be $1000*(2^{10})$ i.e.
 1,024,000 rabbits.

Tted

A class of 100 students. 24 of them
 are girls and 32 are not. Which
 base am I using

Answer

Let the base be X .

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 75
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Therefore

$$\begin{aligned}(X^2 + X + 0) &= (2X + 4) + \\(3X + 2) \\X^2 &= 5X + 6 \\X^2 - 5X - 6 &= 0 \\(X-6)(X+1) &= 0\end{aligned}$$

Therefore base is 6A man is stranded on a desert island. All he has to drink is a 20oz bottle of sprite.

To conserve his drink he decides that on the first day he will drink one oz and the refill the bottle back up with water. On the 2nd day he will drink 2oz and refill the bottle. On the 3rd day he will drink 3oz and so on...

By the time all the sprite is gone, how much water has he drunk?

Submitted **Answer**

The man drunk 190oz of water.

It is given that the man has 20oz bottle of sprite. Also, he will drink 1oz on the first day

and refill the bottle with water, will drink 2oz on the second day and refill the bottle, will drink 3oz on the third day and refill the bottle, and so on till 20th day. Thus at the end of 20 days, he must have drunk $(1 + 2 + 3 + 4 + \dots + 18 + 19 + 20) = 210\text{oz}$ of liquid.

Out of that 210oz, 20oz is the sprite which he had initially. Hence, he must have drunk 190oz of water.*ed*

You have four 9's and you may use any of the (+, -, /, *) as many times as you like. I want to see a mathematical expression which uses the four 9's to = 100

How many such expressions can you make?

Submitted

Answer

There are 5 such expressions.

$$99 + (9/9) = 100$$

$$(99/.99) = 100$$

$$(9/.9) * (9/.9) = 100$$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 76
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$((9*9) + 9)/.9 = 100$$

$$(99-9)/.9 = 100$$

Two planes take off at the same exact moment. They are flying across the Atlantic. One leaves New York and is flying to Paris at 500 miles per hour. The other leaves Paris and is flying to New York at only 450 miles per hour (because of a strong head wind).

Which one will be closer to Paris when they meet?
They will both be the same distance from Paris when they meet!!!

12 members were present at a board meeting. Each member shook hands with all of the other members before & after the meeting.

How many hand shakes were there?

Answer

132

Think of it this way: the first

person shakes hands with 11 people, the second person also shakes hands with 11 people, but you only count 10, because the hand shake with the first person was already counted. Then add 9 for the third person, 8 for the fourth, & so on.

66 hand shakes took place before & 66 after the meeting, for a total of 132.
Arrange five planets such that 4 of them add up to 5th planet numerically. Each of the letters of the planet should represent a unique number from the range 0 - 9. You have to use all ten digits.

There is an amazing mathematical relationship exists among the names of the planet.

Answer

The tough process is initially to find planets such that the total number of alphabets in them is 10.

The only possible combination of planets is Saturn, Uranus,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 77
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Venus, Mars and Neptune
because for other combinations
there will be more than 10
alphabets. Among these five,
Neptune is the lenghtiest, so it
must be the sum of the other
four.

$$\begin{array}{r}
 \text{S A T U R N} \\
 \text{U R A N U S} \\
 \text{V E N U S} \\
 + \quad \text{M A R S} \\
 \hline
 \text{N E P T U N E}
 \end{array}
 \qquad
 \begin{array}{r}
 3 \ 5 \ 8 \ 6 \ 9 \ 1 \\
 6 \ 9 \ 5 \ 1 \ 6 \ 3 \\
 2 \ 0 \ 1 \ 6 \ 3 \\
 + \quad 4 \ 5 \ 9 \ 3 \\
 \hline
 1 \ 0 \ 7 \ 8 \ 6 \ 1 \ 0
 \end{array}$$

Now the only possible value for
N is 1. By finding the value for
S, we can reach the result:

You have 14 apples. Your
Friend Marge takes away 3 and
gives you 2. You drop 7 but
pick up 4. Bret takes 4 and
gives 5. You take one from
Marge and give it to Bret in
exchange for 3 more. You give
those 3 to Marge and she gives
you an apple and an orange.
Frank comes and takes the
apple Marge gave you and
gives you a pear. You give the
pear to Bret in exchange for an
apple. Frank then takes an
apple from Marge, gives it to
Bret for an orange, gives you
the orange for an apple.

How many pears do you have?
Submitted

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 78
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Answer

None

Frank gave you a pear in exchange of the apple which Marge gave you. And you gave that pear to Bret in exchange for an apple. All the others exchanges involved apples and/or oranges.

Four couples are going to the movie. Each row holds eight seats. Betty and Jim don't want to sit next to Alice and Tom. Alice and Tom don't want to sit next to Gertrude and Bill. On the otherhand, Sally and Bob don't want to sit next to Betty and Jim.

How can the couples arrange themselves in a row so that they all sit where they would like?

Submitted by : Tara Smith

Answer

From the given data, it can be inferred that:
(Sally & Bob) NOT (Betty &

Jim) NOT (Alice & Tom) NOT (Gertrude & Bill)

(A) NOT (B) means A and B can not seat next to each other.

Now, it is obvious that (Betty & Jim) and (Alice & Tom) will occupy the corner seats as both of them can have only one neighbour. Therefore, (Gertrude & Bill) will seat next to (Betty & Jim)
(Sally & Bob) will seat next to (Gertrude & Bill)
(Alice & Tom) will seat next to (Sally & Bob)

Thus, there are two possible arrangements - a mirror images of each other.

1. (Betty & Jim) - (Gertrude & Bill) - (Sally & Bob) - (Alice & Tom)
2. (Alice & Tom) - (Sally & Bob) - (Gertrude & Bill) - (Betty & Jim)

Substitute digits for the letters to make the following addition problem true.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

```

      W H O
S   E

      T E E
T   H

      A
R   E

+

A   S

-----
-----

      S W O R
D   S

```

Note that the leftmost letter
can't be zero in any word. Also,
there must be a one-to-one
mapping between digits and
letters. e.g. if you substitute 3
for the letter H, no other letter
can be 3 and all other H in the
puzzle must be 3.

Answer

It is obvious that S=1 and T=9.

Also, (H + E) should be greater
than 10 and hence, (E + H + E)
must 20. Thus, there are 3
possible values for (E, H) pair:

(6, 8) or (7, 6) or (8, 4). Use
trial-n-error and everything will
fit-in.

```

      W H O S E
2   8   5   1   6

      T E E T H
9   6   6   9   8

      A R E
4   7   6

+

      A S
+      4   1

-----
-----

      S W O R D S
1   2   5   7   3   1

```

When Socrates was imprisoned
for being a disturbing influence,
he was held in high esteem by
his guards. All four of them
hoped that something would
occur that would facilitate his
escape. One evening, the
guard who was on duty
intentionally left the cell door
open so that Socrates could
leave for distant parts.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 80
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Socrates did not attempt to escape, as it was his philosophy that if you accept society's rules, you must also accept it's punishments. However, the open door was considered by the authorities to be a serious matter. It was not clear which guard was on that evening. The four guards make the following statements in their defense:

Aaron:

- A) I did not leave the door open.
- B) Clement was the one who did it.

Bob:

- A) I was not the one who was on duty that evening.
- B) Aaron was on duty.

Clement:

- A) Bob was the one on duty that evening.
- B) I hoped Socrates would escape.

David:

- A) I did not leave the door

open.

- B) I was not surprised that Socrates did not attempt to escape.

Considering that, in total, three statements are true, and five guard is guilty**Answer**

David is the guilty.

Note that "All four of them hoped that something would occur that would facilitate his escape". It makes Clement's statement B True and David's statement B False.

Now consider each of them as a guilty, one at a time.

	Aar on		Bob		Cle ment		Davi d		T r u e S t m t s
	A	B	A	B	A	B	A	B	
If A ar	F al s	F al s	T r u	T r u	F al s	T r u	T r u	F al s	4

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 81
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

on is gu ilt y	e	e	e	e	e	e	e	e	
If B ob is gu ilt y	T r u e	F a l s e	F a l s e	F a l s e	T r u e	T r u e	T r u e	F a l s e	4
If Cl e m en t is gu ilt y	T r u e	T r u e	T r u e	F a l s e	F a l s e	T r u e	T r u e	F a l s e	5
If D av id is gu ilt y	T r u e	F a l s e	T r u e	F a l s e	F a l s e	T r u e	F a l s e	F a l s e	3

Since in total, three statements are true and five statements are false. It is clear from the above table that David is?

Brain Teaser No : 00474

Given any whole number take the sum of the digits, and the product of the digits, and multiply these together to get a new whole number.

For example, starting with 6712, the sum of the digits is $(6+7+1+2) = 16$, and the product of the digits is $(6*7*1*2) = 84$. The answer in this case is then $84 \times 16 = 1344$.

If we do this again starting from 1344, we get $(1+3+4+4) * (1*3*4*4) = 576$

And yet again $(5+7+6) * (5*7*6) = 3780$

At this stage we know what the next answer will be (without working it out) because, as one digit is 0, the product of the digits will be 0, and hence the answer will also be 0.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 82
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Can you find any numbers to
 which when we apply the above
 mentioned rule repeatedly, we
 never end up at 0?

Brain Teaser No : 00474

Given any whole number
 take the sum of the
 digits, and the product
 of the digits, and
 multiply these together
 to get a new whole
 number.

For example, starting
 with 6712, the sum of
 the digits is $(6+7+1+2)$
 $= 16$, and the product
 of the digits is
 $(6*7*1*2) = 84$. The
 answer in this case is
 then $84 \times 16 = 1344$.

If we do this again
 starting from 1344, we
 get $(1+3+4+4) *$
 $(1*3*4*4) = 576$

And yet again $(5+7+6) *$
 $(5*7*6) = 3780$

At this stage we know
 what the next answer
 will be (without

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 83
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

working it out)
 because, as one digit
 is 0, the product of
 the digits will be 0,
 and hence the answer
 will also be 0.

Can you find any
 numbers to which when
 we apply the above
 mentioned rule
 repeatedly, we never
 end up at 0?

There were N stations on a
 railroad. After adding X stations
 46 additional tickets have to be
 printed.

Find N and X.

Answer

Let before adding X stations,
 total number of tickets
 $t = N(N-1)$

After adding X stations total
 number of tickets are
 $t + 46 = (N+X)(N+X-1)$

Subtracting 1st from 2nd
 $46 = (N+X)(N+X-1) - N(N-1)$
 $46 = N^2 + NX - N + NX + X^2 - X$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

$$\begin{aligned}
 & - N^2 + N \\
 46 &= 2NX + X^2 - X \\
 46 &= (2N - 1)X + X^2 \\
 X^2 + (2N - 1)X - 46 &= 0
 \end{aligned}$$

Now there are only two
 possible factors of 46. They are
 (46,1) and (23,2)

$$\begin{aligned}
 \text{Case I: } (46,1) \\
 2N - 1 &= 45 \\
 2N &= 46 \\
 N &= 23 \\
 \text{And } X &= 1
 \end{aligned}$$

$$\begin{aligned}
 \text{Case II: } (23,2) \\
 2N - 1 &= 21 \\
 2N &= 22 \\
 N &= 11 \\
 \text{And } X &= 2
 \end{aligned}$$

Hence, there are 2 possible
 answers.

An emergency vehicle travels
 10 miles at a speed of 50 miles
 per hour.

How fast must the vehicle travel
 on the return trip if the round-
 trip travel time is to be 20
 minutes?

Answer

75 miles per hour

While going to the destination,
 the vehicle travels 10 miles at
 the speed of 50 miles per hour.
 So the time taken to travel 10
 miles is
 $= (10 * 60) / 50$
 $= 12 \text{ minutes}$

Now it's given that round-trip
 travel time is 20 minutes. So
 the vehicle should complete its
 return trip of 10 miles in 8
 minutes. So the speed of the
 vehicle must
 $= (10 * 60) / 8$
 $= 75 \text{ miles per hour}$

All of the students at a college
 are majoring in psychology,
 business, or both. 73% of the
 students are psychology
 majors, & 62% are business
 majors.

If there are 200 students, how
 many of them are majoring in
 both psychology & business?

Answer

70 students are majoring in

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 84
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

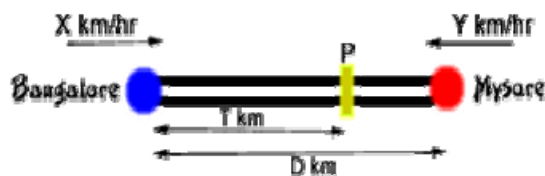
You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

both, psychology & business

If 73% of the students are psychology majors, we know that 27% are not psychology majors. By the same reasoning, 38% are not business majors, because 62% of the students do major in business. So: $27 + 38 = 65$

65% of the students are not majoring in both psychology & business, so 35% are double majors, a total of 70 students. Two trains starting at same time, one from Bangalore to Mysore and other in opposite direction arrive at their destination 1hr and 4hrs respectively after passing each other.

Answer



The speed of Bangalore-Mysore train is TWICE the speed of Mysore-Bangalore

train.

Let the distance between Bangalore and Mysore is D kms.

Also, let speed of the train from Bangalore to Mysore is X km/hr and speed of the train from Mysore to Bangalore is Y km/hr.

Now, assume that both the trains met each other at T kms from the Bangalore (point P in figure)

Time taken by Bangalore-Mysore train to reach P = Time taken by Mysore-Bangalore train to reach P

$$(T / X) = (D - T) / Y \text{ -----equ(I)}$$

Also, Bangalore-Mysore train and Mysore-Bangalore train arrive destination 1 hr and 4 hrs respectively after passing each other. It means that Bangalore-Mysore train travels (D - T) kms in 1 hr at X km/hr and Mysore-Bangalore train travels T kms in 4 hrs at Y km/hr. Hence,

$$(D - T) = X \text{ and } T = 4 * Y$$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 85
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Substituting these values in
equation I, we get
 $(4 * Y) / X = X / Y$
 $4 * Y * Y = X * X$
 $2 * Y = X$

Hence, the speed of Bangalore-
Mysore train is TWICE the
speed of Mysore-Bangalore
train.How much faster is one
train from other?

Answer

49 times

Let's assume that everyone
clinked their mug with friend to
his left only. It means that there
are total 49 clinks. Now the
right clink of each person is left
clink of the person on right
which is already happened.
Hence, there are only 49 clinks.

Mrs. Watsherface had a garage
sale. A customer named Gina
bought an old lamp and a rug.
She paid a total of \$5.25 for
everything. The rug cost 25
cents more than the lamp.

How much did each cost?

Submitted by : Kimi

Answer

**The lamp cost \$ 2.50 and the
rug cost \$ 2.75**

A simple one.

Assume that the lamp cost \$ L.
Hence the rug must have cost \$
(L + 0.25)

Also, total cost is \$ 5.25, Hence
the equation :

$$L + L + 0.25 = 5.25$$

$$2 * L = 5$$

$$L = 2.50$$

Hence, the lamp cost \$ 2.50
and the rug cost \$ 2.75

Brain Teaser No : 00518

Write 1111.....(243 times) i.e. a
243 digit number with all 1s.

Prove that it is divisible by 243.

*Submit t***Answer**

Prove it using the mathematical
induction.

First here are a couple of things

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 86
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

to note:

always be divisible by 3.

[1] A number whose digits add up to a multiple of three is divisible by 3.

e.g. 369: $3+6+9=18$: $1+8=9$
 which is a multiple of 3 hence 369 is divisible by 3.

Also, if we multiply N with P we are essentially repeating N for (D-1) times.

e.g. if $N=369$ then $D=3$,
 $P=1001001$ and
 $N \times P=369369369$

[2] Whenever a number (X) is multiplied with another number (Y) then the product ($X \times Y$) will have all the factors of X as well as all the factors of Y in its set of factors.

e.g. if X has factors of (1,P,Q,X) and Y has factors of (1,Q,R,Y) then $X \times Y$ has factors of (1,P,Q,Q,R,X,Y).

Let's start with $N=111$. It is clear that N is divisible by 3.

(From [1])

Also, $D=3$ and $P=1001001$

$N \times P=111111111$ (9 times)

The resulting number 111111111 must be divisible by 9 as N and P both are divisible by 3.

Let

N = any series of digits (e.g. $N=369$)

D = the number of digits in N (e.g. if $N=369$ then $D=3$)

P = is a number constructed in the following way : a 1, followed by (D-1) 0s, followed by another 1, followed by (D-1) 0s, followed by another 1. (e.g. if $N=369$ then $D=3$ and P would be 1001001) Note that P will

Now, let's start with

$N=111111111$. It is clear that N is divisible by 9.

Also, $D=9$ and

$P=1000000001000000001$

$N \times P=111111111... (27 \text{ times})$

The resulting number 1111111... (27 times) must be divisible by 27 as N is divisible by 9 and P is divisible by 3.

Repeat the same procedure for $N=1111111... (27 \text{ times})$ The

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 87
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

resulting number 1111111...
(81 times) must be divisible by
81 as N is divisible by 27 and P
is divisible by 3.

Similarly, for N=1111111... (81
times) The resulting number
1111111... (243 times) must be
divisible by 243 as N is divisible
by 81 and P is divisible by 3.

Thus, 1111111... (243 times) is
divisible by 243.

Thanks to Ryan Hutcherson for
solution !!!

edKaran bought a little box of
midget matches, each one inch
in length. He found that he
could arrange them all in the
form of a triangle whose area
was just as many square
inches as there were matches.

He then used up six of the
matches, and found that with
the remainder he could again
construct another triangle
whose area was just as many
square inches as there were
matches.

And using another six matches

he could again do precisely the
same.

How many matches were there
in the box originally?

Note that the match-box can
hold maximum of 50 matches.

Answer

**Initially, there were 42 or 36
matches in the match-box.**

There are 42 matches in the
box with which he could form a
triangle 20, 15, 7, with an area
of 42 square inches. After 6
matches had been used, the
remaining 36 matches would
form a triangle 17, 10, 9, with
an area of 36 square inches.
After using another 6 matches,
the remaining 30 matches
would form a triangle 13, 12, 5,
with an area of 30 square
inches. After using another 6,
the 24 remaining would form a
triangle 10, 8, 6, with an area of
24 square inches.

Thus, there are two possible
answers. There were either 42
or 36 matches in the match-

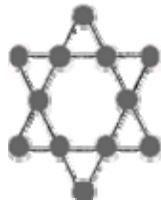
You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 88
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

box.

Using trial and error. There are
 2 solutions to it and may be
 more.

Also it is interesting to
 know that there are
 just 5 such triangles
 for which the
 perimeter and the
 area is the same
 (assuming all sides are
 integers) and they are :



1. **24** (10, 8, 6)
2. **30** (13, 12, 5)
3. **36** (17, 10, 9)
4. **42** (20, 15, 7)
5. **60** (29, 25, 6)

$$\begin{array}{r}
 2 \ 4 \ 4 \ 2 \\
 1 \ 4 \ 4 \ 2 \\
 + \ 5 \ 4 \ 4 \ 2 \\
 \hline
 9 \ 3 \ 2 \ 6 \\
 \\
 4 \ 1 \ 1 \ 4 \\
 5 \ 1 \ 1 \ 4 \\
 + \ 0 \ 1 \ 1 \ 4 \\
 \hline
 9 \ 3 \ 4 \ 2
 \end{array}$$

Find the values of each of the
 alphabets.

$$\begin{array}{r}
 N \ O \ O \ N \\
 S \ O \ O \ N \\
 + \ M \ O \ O \ N \\
 \hline
 J \ U \ N \ E
 \end{array}$$

Answer

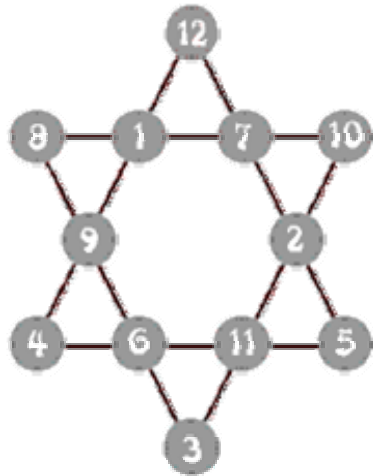
We have to fill number from 1
 to 12 at the intersection point of
 two or more lines. We have to
 construct a star using two
 triangle. The sum of all number
 lying in straight lines should be
 same. This can be easily
 understood by the fig. and

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 89
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

hence solved.

*Submitted by : Vaibhav
Gupta*



We have one answer where
sum of all the numbers lying in
straight lines is 26.

If you have others, do submit
them.

Brain Teaser No : 00355

Montu, Bantu, Chantu and
Pintu have pets.

Montu says, "If Pintu and I each
have a dog, then exactly one of
Bantu and Chantu has a dog."

Bantu says, "If Chantu and I

each have a cat, then exactly
one of Montu and Pintu has a
dog."

Chantu says, "If Montu and I
each have a dog, then exactly
one of Bantu and Pintu has a
cat."

Pintu says, "If Bantu and I each
have a cat, then exactly one of
Bantu and I has a dog."

Only one of the four is telling
the truth. Who is telling the
truth?

Answer

Bantu is telling the truth.

**For a IF-THEN statement to
be false, IF part has to be
true and THEN part has to be
false.**

Since only one statement is
true and remaining three are
false, IF part of three
statements are true & THEN
part of one statement is true.
Let's put the given information
in table. The pet-name in the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 90
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

normal text represents the IF
part and the pet-name in round
brackets represents the THEN
part.

	Montu	Bantu	Chantu	Pintu
Montu says	Dog	(Dog)	(Dog)	Dog
Bantu says	(Dog)	Cat	Cat	(Dog)
Chantu says	Dog	(Cat)	Dog	(Cat)
Pintu says		Cat (Dog)		Cat (Dog)

It is clear that the IF part of the
statements made by Montu,
Chantu and Pintu are true as
they do not contradict each
other. And the IF part of the
statement made by Bantu is
false.

Thus, Bantu is telling the truth.

Montu have a Dog and may or
may not have a Cat.

Bantu have a Cat.

Chantu have a Dog.

Pintu have a Dog and a Cat.

Brain Teaser No : 00520

Somebody marked the six
faces of a die with the numbers
1, 2 and 3 - each number twice.
The die was put on a table.
Four people - Abu, Babu, Calu
and Dabu - sat around the table
so that each one was able to
see only three sides of the die
at a glance.

- Abu sees the number 1
and two even numbers.
- Babu and Calu can see
three different numbers
each.
- Dabu sees number 2
twice and he can't
remember the third
number.

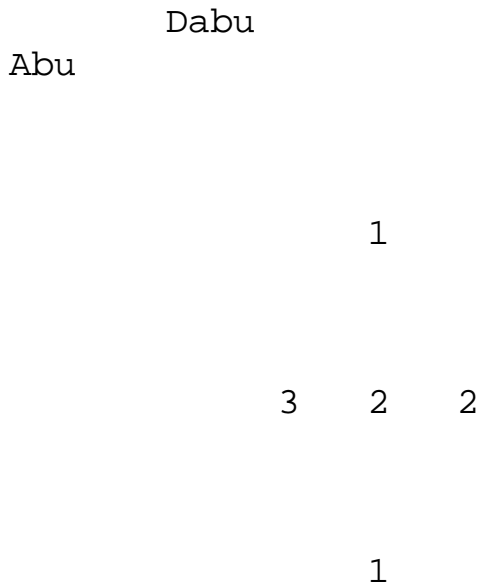
What number is face down on
the table? **Answer**

**Number 3 is face down on
the table.**

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

If Abu can see two even
numbers i.e. number 2 twice,
and if Dabu can see number 2
twice, then number 2 must be
facing up.

Now everything else is simple.
(see the following diagram)



Calu
Babu
Thus, the number hidden from
the view is number 3 and hence
the answer.
Two identical pack of cards A
and B are shuffled throughly.

One card is picked from A and
shuffled with B. The top card
from pack A is turned up. If this
is the Queen of Hearts, what
are the chances that the top
card in B will be the King of
Hearts?

Answer

52 / 2703

There are two cases to be
considered.

CASE 1 : King of Hearts is
drawn from Pack A and
shuffled with Pack B

Probability of drawing King of
Hearts from Pack A = $1/51$ (as
Queen of Hearts is not to be
drawn)
Probability of having King of
Hearts on the top of the Pack B
= $2/53$

So total probability of case 1 =
 $(1/51) * (2/53) = 2 / (51 * 53)$

CASE 2 : King of Hearts is not
drawn from Pack A

Probability of not drawing King

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 92
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

of Hearts from Pack A = 50/51
 (as Queen of Hearts is not to
 be drawn)
 Probability of having King of
 Hearts on the top of the Pack B
 = 1/53

So total probability of case 2 =
 $(50/51) * (1/53) = 50 / (51 * 53)$

Now adding both the
 probability, the required
 probability is
 $= 2 / (51 * 53) + 50 / (51 * 53)$
 $= 52 / (51 * 53)$
 $= 52 / 2703$
 $= 0.0192378$

How many possible
 combinations are there in a
 3x3x3 rubics cube?

In other words, if you wanted to
 solve the rubics cube by trying
 different combinations, how
 many might it take you (worst
 case senerio)?

How many for a 4x4x4 cube?

Submitted

Answer

**There are $4.3252 * 10^{19}$
 possible combinations for**

**3x3x3 Rubics and $7.4012 * 10^{45}$
 possible combinations
 for 4x4x4 Rubics.**

Let's consider 3x3x3 Rubics
 first.

There are 8 corner cubes,
 which can be arranged in 8!
 ways.

Each of these 8 cubes can be
 turned in 3 different directions,
 so there are 3^8 orientations
 altogether. But if you get all but
 one of the corner cube into
 chosen positions and
 orientations, only one of 3
 orientations of the final corner
 cube is possible. Thus, total
 ways corner cubes can be
 placed = $(8!) * (3^8)/8 = (8!) * (3^7)$

Similarly, 12 edge cubes can
 be arranged in 12! ways.

Each of these 12 cubes can be
 turned in 2 different directions,
 so there are 2^{12} orientations
 altogether. But if you get all but
 one of the edge cube into
 chosen positions and
 orientations, only one of 2

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 93
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

orientations of the final edge
 cube is possible. Thus, total
 ways edge cubes can be
 placed = $(12!) * (2^{12})/2 = (12!) * (2^{11})$

Here, we have essentially
 pulled the cubes apart and
 stuck cubes back in place
 wherever we please. In reality,
 we can only move cubes
 around by turning the faces of
 the cubes. It turns out that you
 can't turn the faces in such a
 way as to switch the positions
 of two cubes while returning all
 the others to their original
 positions. Thus if you get all but
 two cubes in place, there is
 only one attainable choice for
 them (not 2!). Hence, we must
 divide by 2.

Total different possible
 combinations are

$$= [(8!) * (3^7)] * [(12!) * (2^{11})] / 2$$

$$= (8!) * (3^7) * (12!) * (2^{10})$$

$$= 4.3252 * 10^{19}$$

Similarly, for 4x4x4 Rubics total
 different possible combinations

are

$$= [(8!) * (3^7)] * [(24!)] * [(24!) / (4!^6)] / 24$$

$$= 7.4011968 * 10^{45}$$

Note that there are 24 edge
 cubes, which you can not turn
 in 2 orientations (hence no
 $2^{24} / 2$). Also, there are 4
 center cubes per face i.e. $(24!) / (4!^6)$. You can switch 2 cubes
 without affecting the rest of the
 combination as 4*4*4 has even
 dimensions (hence no division
 by 2). But pattern on one side is
 rotated in 4 directions over 6
 faces, hence divide by 24.

Brain Teaser No : 00528

Substitute digits for the letters
 to make the following relation
 true.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 94
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

$$\begin{array}{r} \text{E} \quad \text{R} \\ \text{V} \quad \text{E} \\ \text{M} \quad \text{E} \\ \text{---} \end{array} \quad + \quad \begin{array}{r} \text{N} \quad \text{E} \quad \text{V} \\ \text{L} \quad \text{E} \quad \text{A} \\ \text{---} \\ \text{A} \quad \text{L} \quad \text{O} \end{array}$$

A tough one!!!

solve it. Now use trial-n-error method.

		N	E	V	E	R	
2	1	4	1	9			
		L	E	A	V	E	
3	1	5	4	1			
	+				M	E	
+				6	1		
		A	L	O	N	E	
5	3	0	2	1			

If you hire 5 people randomly, what are the chances you will hire at least 1 pair of identical twins? (Needless to say, this could cause trouble ;))

The probability to hire 5 people with at least 1 pair of identical twins is 25.28%

5 people from the 20 people
can be hired in $20C5 = 15504$
ways.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Now, divide 20 people into two
groups of 10 people each :
G1 - with all twins
G2 - with all people other than
twins

Let's find out all possible ways
to hire 5 people without a single
pair of indential twins.

Peop le from G1	Peop le from G2	No of ways to hire G1 withou t a single pair of indenti cal twins	No of wa ys to hire G2	Tot al way s
0	5	$^{10}C_0$	$^{10}C_5$	252
1	4	$^{10}C_1$	$^{10}C_4$	210
2	3	$^{10}C_2^* \frac{8}{9}$	$^{10}C_3$	480
3	2	$^{10}C_3^* \frac{8}{9} \frac{6}{8}$	$^{10}C_2$	360
4	1	$^{10}C_4^*$	$^{10}C_1$	800

		$\frac{8}{9}^* \frac{6}{8}^* \frac{4}{7}$	1	
5	0	$^{10}C_5^* \frac{8}{9}^* \frac{6}{8}^* \frac{4}{7}^* \frac{2}{6}$	$^{10}C_0$	32
Total				11584

Thus, total possible ways to
hire 5 people without a single
pair of indential twins = 11584
ways

So, total possible ways to hire 5
people with at least a single
pair of indential twins = 15504
- 11584 = 3920 ways

Hence, the probability to hire 5
people with at least a single
pair of indential twins
= $3920/15504$
= $245/969$
= 0.2528
= 25.28%*itted*
Veeru says to Jay, "Can you
figure out how many Eggs I
have in my bucket?" He gives 3

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 96
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

clues to Jay: If the number of Eggs I have

1. is a multiple of 5, it is a number between 1 and 19
2. is not a multiple of 8, it is a number between 20 and 29
3. is not a multiple of 10, it is a number between 30 and 39

How many Eggs does Veeru have in his bucket?

Answer

32 eggs

Let's apply all 3 condition separately and put all possible numbers together.

First condition says that if multiple of 5, then the number is between 1 and 19. Hence, the possible numbers are (5, 10, 15, 20, 25).
Second condition says that if not a multiple of 8, then the number is between 20 and 29. Hence, the possible numbers are (21, 23, 25, 27, 29).
Third condition says that if not a multiple of 10, then the number is between 30 and 39. Hence, the possible numbers are (31, 32, 33, 34, 35, 36, 37, 38, 39).

Second condition says that if not a multiple of 8, then the number is between 20 and 29.

Hence, the possible numbers are (8, 16, 20, 24, 28, 32).

Third condition says that if not a multiple of 10, then the number is between 30 and 39. Hence, the possible numbers are (31, 32, 33, 34, 35, 36, 37, 38, 39).

Only number 32 is there in all 3 result sets. That means that only number 32 satisfies all three conditions. Hence, Veeru have 32 eggs in his bucket.

Mr. Black, Mr. White and Mr. Grey were chatting in the Yahoo conference. They were wearing a black suit, a white suit and a grey suit, not necessarily in the same order.

Mr. Grey sent message, "We all are wearing suit that are of the same color as our names but none of us is wearing a suit that is the same color as his name."

On that a person wearing the white suit replied, "What

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 97
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

difference does that make?"

Can you tell what color suit
each of the three persons had
on?

Answer

**Mr. Grey is wearing Black
suit.**

**Mr. White is wearing Grey
suit.**

**Mr. Black is wearing White
suit.**

Mr. Grey must not be wearing
grey suit as that is the same
colour as his name. Also, he
was not wearing white suit as
the person wearing white suit
responded to his comment. So
Mr Grey must be wearing a
black suit.

Similarly, Mr. White must be
wearing either black suit or grey
suit. But Mr. Grey is wearing a
black suit. Hence, Mr. White
must be wearing a grey suit.

And, Mr. Black must be wearing
white suit.

Substitute numbers for the
letters so that the following

mathematical expressions are
correct.

$$\begin{array}{rcc} & ABC & DEF \\ & \text{GHI} & \\ & \text{---} = \text{IE} & \text{---} = \\ \text{IE} & \text{---} = \text{IE} & \\ & 3 & 6 \\ & 9 & \end{array}$$

Note that the same number
must be used for the same
letter whenever it appears.

Answer

**A=2, B=1, C=9, D=4, E=3, F=8,
G=6, H=5, I=7**

Let's start with $\text{GHI} = 9 * \text{IE}$.
Note that I appears on both the
side. Also, after multiplying IE
by 9 the answer should have I
at the unit's place. The possible
values of IE are 19, 28, 37, 46,
55, 64, 73, 82 and 91; out of
which only 64, 73 and 82
satisfies the condition. (as all
alphabet should represent
different digits)

Now, consider $\text{DEF} = 6 * \text{IE}$.
Out of three short-listed values,
only 73 satisfies the equation.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 98
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Also, $ABC = 3 * IE$ is satisfied
 by 73.

Hence, $A=2, B=1, C=9, D=4,$
 $E=3, F=8, G=6, H=5, I=7$

657

--- = 73 ---
 = 73 --- = 73

9 3 6

Brain Teaser No : 00374

A, B, C and D are related to
 each other.

- One of the four is the opposite sex from each of the other three.
- D is A's brother or only daughter.
- A or B is C's only son.
- B or C is D's sister.

Answer

A, B & D are males; C is female. B is C's only son. A & D are C's brothers.

A(male) ---
 C(female) --- D(male)

|

|

B(male)
 Work out which relation can
 hold and discard the
 contradictory options.

From (2) and (4), D can not be
 a only daughter and have a
 sister (B or C). Hence, D is A's
 brother i.e. D is a Male.

From (4), let's say that B is D's
 sister i.e. B is Female.

From (3), A is C's only son i.e.
 A is Male.

But D is A's brother which
 means that A is not C's only
 son. Hence, our assumption
 was wrong.

Thus, C is D's sister i.e. C is
 Female. And B must be C's
 only son.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 99
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Now it is clear that D & B are
Males and C is Female. A must
be a Male as only one of them
is of opposite sex from each of
the other three. And he is C &
D's brother.How are they
related to each other?

Dr. DoLittle always goes
walking to the clinic and takes
the same time while going and
while coming back. One day he
noticed something.

When he left the home, the
hour hand and the minute hand
were exactly opposite to each
other and when he reached the
clinic, they were together.

Similarly, when he left the
clinic, the hour hand and the
minute hand were together and
when he reached the home,
they were exactly opposite to
each other.

How much time does Dr.
DoLittle take to reach home
from the clinic? Give the
minimal possible answer.

Answer

32 minutes 43.6 seconds

In twelve hours, the minute
hand and the hour hand are
together for 11 times. It means
that after every $12/11$ hours,
both the hands are together.

Similarly in twelve hours, the
minute hand and the hour hand
are exactly opposite to each
other for 11 times. It means that
after every $12/11$ hours, both
the hands are opposite.

Now, let's take an example. We
know that at 12 both the hands
are together and at 6 both the
hands are exactly opposite to
each other.

After 6, both the hands are in
opposition at $[6+(12/11)]$ hours,
 $[6+2*(12/11)]$ hours,
 $[6+3*(12/11)]$ hours and so on.
The sixth such time is
 $[6+6*(12/11)]$ hours which is the
first time after 12. Thus after
12, both the hands are opposite
to each other at 12:32:43.6

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 100
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Hence, Dr. DoLittle takes 32 minutes and 43.6 seconds to reach home from the clinic.

SlowRun Express runs between Bangalore and Mumbai, For the up as well as the down journey, the train leaves the starting station at 10:00 PM everyday and reaches the destination at 11:30 PM after three days.

Mr. Haani once travelled by SlowRun Express from Mumbai to Bangalore. How many SlowRun Express did he cross during his journey?

Answer

Mr. Haani crossed 7 SlowRun Expresses during his journey.

Let's say that Mr. Haani travelled by SlowRun Express on Wednesday 10:00PM from Mumbai. The first train he would have crossed is the one scheduled to arrive at Mumbai at 11:30 PM the same day i.e. the one that left Bangalore at

10:00 PM on last Sunday.

Also, he would have crossed the last train just before reaching Bangalore on Saturday.

Thus, Mr. Haani must have crossed 7 SlowRun Expresses during his journey. Six cabins numbered 1-6 consecutively, are arranged in a row and are separated by thin dividers. These cabins must be assigned to six staff members based on following facts.

1. Miss Shalaka's work requires her to speak on the phone frequently throughout the day.
2. Miss Shudha prefers cabin number 5 as 5 is her lucky number.
3. Mr. Shaan and Mr. Sharma often talk to each other during their work and prefers to have adjacent cabins.
4. Mr. Sinha, Mr. Shaan and Mr. Solanki all smoke. Miss Shudha is allergic to smoke and must have

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 101
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

non-smokers adjacent to
her.

5. Mr. Solanki needs silence
during work.

Can you tell the cabin numbers
of each of them?

Answer

**The cabins from left to right
(1-6) are of Mr. Solanki, Mr.
Sinha, Mr. Shaan, Mr.
Sharma, Miss Shudha and
Miss Shalaka.**

From (2), cabin number 5 is
assigned to Miss Shudha.

As Miss Shudha is allergic to
smoke and Mr. Sinha, Mr.
Shaan & Mr. Solanki all smoke,
they must be in cabin numbers
1, 2 and 3 not necessarily in the
same order. Also, Miss Shalaka
and Mr. Sharma must be in
cabin 4 and 6.

From (3), Mr. Shaan must be in
cabin 3 and Mr. Sharma must
be in cabin 4. Thus, Miss
Shalaka is in cabin 6.

As Mr. Solanki needs silence

during work and Mr. Shaan is in
cabin 3 who often talks to Mr.
Sharma during work, Mr.
Solanki must be in cabin 1.
Hence, Mr. Sinha is in cabin 2.

Thus, the cabins numbers are
1# Mr. Solanki,
2# Mr. Sinha,
3# Mr. Shaan,
4# Mr. Sharma,
5# Miss Shudha,
6# Miss Shalaka
SkyFi city is served by 6
subway lines - A, E, I, O, U and
Z.

- When it snows, morning
service on line E is
delayed.
- When it rains or snows,
service on the lines A, U
and Z is delayed both
morning and afternoon.
- When the temperature
drops below 20 C,
afternoon service is
cancelled on either line A
or line O, but not both.
- When the temperature
rises above 40 C,
afternoon service is

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 102
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- cancelled on either line I
or line Z, but not both.
- When service on line A is
delayed or cancelled,
service on line I is also
delayed.
- When service on line Z is
delayed or cancelled,
service on line E is also
delayed.

On February 10, it snows all
day with the temperature at
18C. On how many lines
service will be delayed or
cancelled, including both
morning and afternoon?
SkyFi city is served by 6
subway lines - A, E, I, O, U and
Z.

- When it snows, morning
service on line E is
delayed.
- When it rains or snows,
service on the lines A, U
and Z is delayed both
morning and afternoon.
- When the temperature
drops below 20 C,
afternoon service is
cancelled on either line A
or line O, but not both.

- When the temperature
rises above 40 C,
afternoon service is
cancelled on either line I
or line Z, but not both.
- When service on line A is
delayed or cancelled,
service on line I is also
delayed.
- When service on line Z is
delayed or cancelled,
service on line E is also
delayed.

On February 10, it snows all
day with the temperature at
18C. On how many lines
service will be delayed or
cancelled, including both
morning and afternoon?

In a certain game, if 2
wixsomes are worth 3 changs,
and 4 changs are worth 1 plut,
then 6 plutes are worth how
many wixsomes?

Answer

It is given that
2 wixsomes = 3 changs
8 wixsomes = 12 changs ----- (I)

Also, given that

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 103
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

4 changs = 1 plut
12 changs = 3 plutes
8 wixsomes = 3 plutes -----
From (I)

Therefore,
6 plutes = 16 wixsomes

In a certain year, the number of girls who graduated from City High School was twice the number of boys. If $\frac{3}{4}$ of the girls and $\frac{5}{6}$ of the boys went to college immediately after graduation, what fraction of the graduates that year went to college immediately after graduation?

Answer

Assume that number of boys graduated from City High School = B
Therefore, number of girls graduated from City High School = $2*B$

It is given that $\frac{3}{4}$ of the girls and $\frac{5}{6}$ of the boys went to college immediately after graduation.
Hence, total students went to

college
 $= (\frac{3}{4})(2*B) + (\frac{5}{6})(B)$
 $= B * (\frac{3}{2} + \frac{5}{6})$
 $= (\frac{7}{3})B$

Fraction of the graduates that year went to college immediately after graduation
 $= [(\frac{7}{3})B] / [3*B]$
 $= \frac{7}{9}$

Therefore, the answer is $\frac{7}{9}$

A mule and a donkey were carrying full sacks on their backs.

The mule started complaining that his load was too heavy. The donkey said to him "Why are you complaining? If you gave me one of your sacks I'd have double what you have and if I give you one of my sacks we'd have an even amount."

How many sacks were each of them carrying? Give the minimal possible answer.

Submit t **Answer**

The mule was carrying 5 sacks and the donkey was

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 104
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

carrying 7 sacks.

Let's assume that the mule was carrying M sacks and the donkey was carrying D sacks.

As the donkey told the mule, "If you gave me one of your sacks I'd have double what you have."

$$D + 1 = 2 * (M - 1)$$

$$D + 1 = 2M - 2$$

$$D = 2M - 3$$

The donkey also said, "If I give you one of my sacks we'd have an even amount."

$$D - 1 = M + 1$$

$$D = M + 2$$

Comparing both the equations,

$$2M - 3 = M + 2$$

$$M = 5$$

Substituting M=5 in any of above equation, we get D=7

Hence, the mule was carrying 5 sacks and the donkey was carrying 7 sacks.

edTwo people enter a race in which you run to a point and back. Person A runs 20 mph to and from the point. Person B

runs to the point going 10 mph and 30 mph going back.

Who came in first?

Submitted

Answer

Person A came in first.

Let's assume that the distance between start and the point is D miles.

Total time taken by Person A to finish

$$= (D/20) + (D/20)$$

$$= D/10$$

$$= 0.1D$$

Total time taken by Person B to finish

$$= (D/10) + (D/30)$$

$$= 2D/15$$

$$= 0.1333D$$

Thus, Person A is the Winner.

Alternatively (if you don't like mathematics ;)), analyse the situation as follow:

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 105
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Note that initially speed of Person A (20 mph) was twice the speed of Person B (10 mph). Hence, when Person A (20 mph forward) reached the point, Person B (10 mph forward) was halfway. When Person A (20 mph back) finished, Person B (still 10 mph forward) reached the point.

Thus, Person A wins the race and by that time Person B covers only half the distance, no matter how far the point is!!!
Mark ate half of a pizza on Monday. He ate half of what was left on Tuesday and so on. He followed this pattern for one week.

How much of the pizza would he have eaten during the week?

Submitted

Answer

Mark would have ate 127/128 (99.22%) of the pizza during the week.

Mark ate half the pizza on Monday. On Tuesday, he would

have ate half of the remaining pizza i.e. $\frac{1}{4}$ of the original pizza. Similarly, he would have ate $\frac{1}{8}$ of the original pizza on Wednesday and so on for the seven days.

Total pizza Mark ate during the week is

$$= \frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} + \frac{1}{64} + \frac{1}{128}$$

$$= \frac{127}{128}$$

$$= 99.22\% \text{ of the original pizza}$$

In the General meeting of "Friends Club", Sameer said, "The repairs to the Club will come to a total of Rs 3120 and I propose that this amount should be met by the members, each paying an equal amount."

The proposal was immediately agreed. However, four members of the Club chose to resign, leaving the remaining members to pay an extra Rs 26 each.

How many members did the Club originally have?

Answer

The Club originally had 24

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 106
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

members.

Assume that there were initially
N members.

As 4 members resigned and
remaining members paid Rs 26
each, it means that total
amount of 4 members is equal
to Rs 26 each from remaining
(N-4) members. Thus,

$$4 * (3120 / N) = 26 * (N - 4)$$
$$12480 = 26N^2 - 104N$$
$$26N^2 - 104N - 12480 = 0$$

Solving the quadratic equation
we get N=24.

Hence, the Club originally had
24 members.

Answer

Brain Teaser No : 00206

A tank can be filled by pipe A in
30 minutes and by pipe B in 24
minutes. Outlet pipe C can
empty the full tank in one hour
and twenty minutes.

If the tank is empty initially and
if all the three pipes A, B and C
are opened simultaneously, in

how much time will the tank be
full?

**The tank will be full in 16
minutes.**

In one minute,
pipe A can fill 1/30 part of the
tank.
pipe B can fill 1/24 part of the
tank.
pipe C can empty 1/80 part of
the tank.

Thus, the net water level in one
minute is
= 1/30 + 1/24 - 1/80
= 15/240 part of the tank

Hence, the tank will be full in
240/15 i.e. 16 minutes.

A rich old Arab has three sons.
When he died, he willed his 17
camels to the sons, to be
divided as follows:

First Son to get 1/2 of the
camels Second Son to get
1/3rd of the camels Third Son
to get 1/9th of the camels.

The sons are sitting there trying

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 107
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

to figure out how this can
possibly be done, when a very
old wise man goes riding by.
They stop him and ask him to
help them solve their problem.
Without hesitation he divides
the camels properly and
continues riding on his way.

How did he do it?

Answer

The old man temporarily added
his camel to the 17, making a
total of 18 camels.

First son got $\frac{1}{2}$ of it = 9

Second son got $\frac{1}{3}$ of it = 6

Third son got $\frac{1}{9}$ of it = 2

For a total of 17. He then takes
his camel back and rides
away.....

There were two men standing
on a street. The one says to the
other, "I have 3 daughters, the
product of their ages is 36.
What is the age of the OLDEST
daughter?"

The second guy says, "I need
more information." So, the first
guy says, "The sum of their
ages is equal to the address of
the house across the street."

The second guy looks at the
address and says, "I still need
more information." So, the first
guy says, "My oldest daughter
wears a red dress."

Answer

The answer is 9 years.

First you need to find all the
possible sets of three numbers
that when multiplied equals 36:

1 1 36
1 2 18
1 3 12
1 4 9
1 6 6
2 2 9
2 3 6
3 3 4

Then you add the numbers
together to find the sum

1 1 36 = 38
1 2 18 = 21

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 108
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$1\ 3\ 12 = 16$$

$$1\ 4\ 9 = 14$$

$$1\ 6\ 6 = 13$$

$$2\ 2\ 9 = 13$$

$$2\ 3\ 6 = 11$$

$$3\ 3\ 4 = 10$$

Even though we don't know the address the guy knows it. For him to need more information that means that at least two of the sets of numbers has the same sum. Two of them do, 1 6 6 and 2 2 9.

When the first guy said that his OLDEST daughter wears a red dress that meant that there had to be the oldest. So 1 6 6 can't possibly be the answer. So the possible possibility is 2 2 9 and the OLDEST daughter is 9 years old.

Therefore, the answer is 9.
There are 3 colored boxes - Red, Green and Blue. Each box contains 2 envelopes. Each envelope contains money - two of them contain Rs. 25000 each, two of them contain Rs. 15000 each and remaining two contain Rs. 10000 each.

There is one statement written on the cover of each box.

* Red Box: Both, a red box and a blue box contain Rs. 10000 each.

* Green Box: Both, a green box and a red box contain Rs. 25000 each.

* Blue Box: Both, a blue box and a green box contain Rs. 15000 each.

Only one of the above 3 statements is true and the corresponding box contains the maximum amount.

Can you tell which box contains the maximum amount and how much?

Answer

Blue box contains the maximum amount Rs. 40000

As it is given that only one of the given 3 statements is true; assume in turn, each statement to be true & the other 2 false and check whether the corresponding box contains the maximum amount.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 109
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Let's assume that the
statement on the Blue box is
true. Thus, the given 3
statements can be interpreted
as

- * Atmost one, a red box or a
blue box contains Rs. 10000.
- * Atmost one, a green box or a
red box contains Rs. 25000.
- * Both, a blue box and a green
box contain Rs. 15000 each.

Going through all possible
combinations, we can conclude
that

Red Box : Rs. 10000 + Rs.
25000 = Rs. 35000
Green Box : Rs. 10000 + Rs.
15000 = Rs. 25000
Blue Box : Rs. 15000 + Rs.
25000 = Rs. 40000

You can test out for other two
statements i.e. assuming Red
box statement true and then
Green box statement true. In
both the cases, other
statements will contradict the
true statement.

Sachin, Dravid and Ganguly

played in a Cricket match
between India and England.

- None of them scored
more than 99 runs.
- If you add the digits of the
runs scored by Sachin to
his own score, you will
get the runs scored by
Dravid.
- If you reverse the digits of
the runs scored by
Dravid, you will get the
runs scored by Ganguly.
- The total runs scored by
them is 240.

Can you figure out their
individual scores?

Answer

**Sachin, Dravid and Ganguly
scored 75, 87 and 78
respectively.**

Sachin's score must be less
than 86, otherwise Dravid's
score would be more than 99.
Also, he must have scored
atleast 42 - incase Dravid and
Ganguly scored 99 each.

Also, as none of them scored

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 110
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

more than 99 and the total runs scored by them is 240; their individual scores must be around 80.

Now, use trial-n-error method to solve the teaser.

Three men, including Gianni and three woman, including Sachi are in line at the BrentWood post office. Each has two different pieces of business to conduct.

1. The first person is a woman.
2. Carlos wants to send an overnight package.
3. Lau is just ahead of Pimentelli who is the same sex as Lau.
4. Gianni is two places ahead of the person who wants to buy stamps.
5. Knutson - who is the opposite sex than Rendler - isn't the person who wanted to complain about a mail carrier.
6. The six people, not necessarily in the same order are - Anthony, Donna, the person who

wants to fill out a change-of-address form, the one who wants to buy a money order, the one who wants to send Airmail to Tibet and the second person in the line.

7. The four tasks of the last two people in line, not necessarily in the same order are - sending books fourth class, buying a money order, picking up a package and complaining about a mail carrier.
8. The person who wants to send books fourth class is just behind a person of the same sex.
9. Mary is just behind a person who wants to send an insured package.
10. The person who wants to send Airmail to Tibet is either two places ahead of or two places behind the one who wants to add postage to his or her meter.
11. Anthony isn't two places behind the who wants to pickup a registered letter.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 111
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

12. Toriseza is two places ahead of the person who wants to pick up a package.
13. Knutson isn't just ahead of the person who wants to send an item parcel post.

Can you figure out where each customer is in the line, his or her full name (one surname is Loti) and the two things he or she wants to accomplish?
Provide your answer is
POSITION - FIRST NAME - LAST NAME - BUSINESS
format.

Answer

A very TOUGH puzzle !!!

PO S	FIRST NAME	LAST NAME	BUSINE SS
1	Sachi	Loti	• Fill Out a Change-of-Address Form

			• Add Postage to Meter
2	Gianni	Lau	• Pick Up a Registered Letter • Send an Item Parcel Post
3	Carlos	Pimentelli	• Overnight Package • Send Airmail to Tibet
4	Donna	Toriseza	• Buy Stamps • Send an Insured Package
5	Mary	Knutson	• Buy a Money Order • Send Books fourth

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 112
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

			Class
6	Antho ny	Rendle r	<ul style="list-style-type: none"> Complain About a Mail Carrier Pick Up a Package

Brain Teaser No : 00164

Substitute digits for the letters
to make the following relation
true.

```

      W O R
L D

      +   T R A
D E

      -----
      C E N T

```

E R

Note that the leftmost letter
can't be zero in any word. Also,
there must be a one-to-one
mapping between digits and
letters. e.g. if you substitute 3
for the letter W, no other letter

can be 3 and all other W in the
puzzle must be 3.

Answer

A tough one.

It is obvious that C=1. Also, the
maximum possible value of E is
7. Now, start putting possible
values of D, E and R as they
occur frequently and use trial-
n-error.

```

      W O R L D
5 3 6 8 4

      +   T R A D E
7 6 0 4 2

      -----
      C E N T E R
2 9 7 2 6

```

Brain Teaser No : 00107

If you look at a clock and the
time is 3:15.

What is the angle between the
hour and the minute hands? (
The answer to this is not zero!)

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 113
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

7.5 degrees

At 3:15 minute hand will be perfectly horizontal pointing towards 3. Whereas hour hand will be towards 4. Also, hour hand must have covered $\frac{1}{4}$ of angle between 3 and 4.

The angle between two adjacent digits is $360/12 = 30$ degrees.

Hence $\frac{1}{4}$ of it is 7.5 degrees.
An apple vendor has 1000 apples and 10 empty boxes. He asks his son to place all the 1000 apples in all the 10 boxes in such a manner that if he asks for any number of apples from 1 to 1000, his son should be able to pick them in terms of boxes.

How did the son place all the apples among the 10 boxes, given that any number of apples can be put in one box.

Answer

1, 2, 4, 8, 16, 32, 64, 128, 256, 489

Let's start from scratch.

- The apple vander can ask for only 1 apple, so one box must contain 1 apple.
- He can ask for 2 apples, so one box must contain 2 apples.
He can ask for 3 apples, in that case box one and box two will add up to 3.
- He can ask for 4 apples, so one box i.e. third box must contain 4 apples.
- Now using box number one, two and three containing 1, 2 and 4 apples respectively, his son can give upto 7 apples. Hence, forth box must contain 8 apples.
- Similarly, using first four boxes containing 1, 2, 4 and 8 apples, his son can give upto 15 apples. Hence fifth box must contain 16 apples.
- You must have noticed one thing till now that each box till now contains power of 2 apples. Hence the answer is 1, 2, 4, 8,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 114
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

16, 32, 64, 128, 256, 489.
This is true for any
number of apples, here in
our case only upto 1000.

Brain Teaser No : 00261

The letters P, Q, R, S, T, U and
V, not necessarily in that order
represents seven consecutive
integers from 22 to 33.

- U is as much less than Q
as R is greater than S.
- V is greater than U.
- Q is the middle term.
- P is 3 greater than S.

Can you find the sequence of
letters from the lowest value to
the highest value?

Answer

**The sequence of letters from
the lowest value to the
highest value is TUSQRPV.**

From (3), Q is the middle term.
____ _ Q _ _ _

From (4), there must be exactly
2 numbers between P and S

which gives two possible
positions.

[1] ____ _S_ ____ _Q_ _P_ ____

[2] ____ ____ _S_ _Q_ ____ _P_

From (1), the number of letters
between U and Q must be
same as the number of letters
between S and R. Also, the
number of letters between them
can be 1, 2 or 3.

Using trial and error, it can be
found that there must be 2
letters between them. Also, it is
possible only in option [2]
above.

[2] ____ _U_ _S_ _Q_ _R_ _P_

From (2) V must be the highest
and the remaining T must be
the lowest number.

T _U_ _S_ _Q_ _R_ _P_
V

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 115
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Thus, the sequence of letters
from the lowest value to the
highest value is TUSQRPV.
A contractor had employed 100
labourers for a flyover
construction task. He did not
allow any woman to work
without her husband. Also,
atleast half the men working
came with their wives.

He paid five rupees per day to
each man, four rupees to each
woman and one rupee to each
child. He gave out 200 rupees
every evening.

How many men, women and
children were working with the
constructor?

Answer

**16 men, 12 women and 72
children were working with
the constructor.**

Let's assume that there were X
men, Y women and Z children
working with the constructor.
Hence,

$$X + Y + Z = 100$$
$$5X + 4Y + Z = 200$$

Eliminating X and Y in turn from
these equations, we get

$$X = 3Z - 200$$

$$Y = 300 - 4Z$$

As if woman works, her
husband also works and atleast
half the men working came with
their wives; the value of Y lies
between X and X/2.

Substituting these limiting
values in equations, we get

$$\text{if } Y = X,$$

$$300 - 4Z = 3Z - 200$$

$$7Z = 500$$

$$Z = 500/7 \text{ i.e. } 71.428$$

$$\text{if } Y = X/2,$$

$$300 - 4Z = (3Z - 200)/2$$

$$600 - 8Z = 3Z - 200$$

$$11Z = 800$$

$$Z = 800/11 \text{ i.e. } 72.727$$

But Z must be an integer,
hence Z=72. Also, X=16 and
Y=12

There were 16 men, 12 women
and 72 children working with
the constructor.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 116
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Because cigars cannot be entirely smoked, a Bobo who collects cigar butts can make a cigar to smoke out of every 3 butts that he finds.

Today, he has collected 27 cigar butts. How many cigars will he be able to smoke?

Answer

13 not 12

He makes 9 originals from the 27 butts he found, and after he smokes them he has 9 butts left for another 3 cigars. And then he has 3 butts for another cigar.

So $9+3+1=13$

In a small town, there are three temples in a row and a well in front of each temple. A pilgrim came to the town with certain number of flowers.

Before entering the first temple, he washed all the flowers he had with the water of well. To his surprise, flowers doubled. He offered few flowers to the God in the first temple and

moved to the second temple. Here also, before entering the temple he washed the remaining flowers with the water of well. And again his flowers doubled. He offered few flowers to the God in second temple and moved to the third temple. Here also, his flowers doubled after washing them with water. He offered few flowers to the God in third temple.

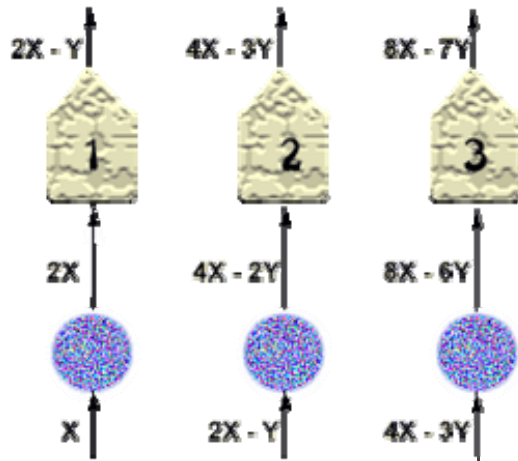
There were no flowers left when pilgrim came out of third temple and he offered same number of flowers to the God in all three temples.

What is the minimum number of flowers the pilgrim had initially? How many flower did he offer to each God?

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 117
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com



The pilgrim had 7 flowers, initially and he offered 8 flowers to each God.

Assume that the pilgrim had X flowers initially and he offered Y flowers to each God.

From the above figure, there are $(8X - 7Y)$ flowers when the pilgrim came out of the third temple. But it is given that there were no flowers left when he came out of third temple. It means that
 $(8X - 7Y) = 0$
 $8X = 7Y$

The minimum values of X and Y are 7 and 8 respectively to satisfy above equation. Hence,

the pilgrim had 7 flowers and he offered 8 flowers to each God.

In general, the pilgrim had $7N$ flowers initially and he offered $8N$ flowers to each God, where $N = 1, 2, 3, 4, \dots$

Brain Teaser No : 00432

Tanya wants to go on a date and prefers her date to be tall, dark and handsome.

1. Of the preferred traits - tall, dark and handsome - no two of Adam, Bond, Cruz and Dumbo have the same number.
2. Only Adam or Dumbo is tall and fair.
3. Only Bond or Cruz is short and handsome.
4. Adam and Cruz are either both tall or both short.
5. Bond and Dumbo are either both dark or both fair.

Who is Tanya's date?

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 118
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Cruz is Tanya's date.

As no two of them have the same number of preferred traits - from (1), exactly one of them has none of the preferred traits and exactly one of them has all the preferred traits.

From (4) and (5), there are only two possibilities:

- * Adam & Cruz both are tall and Bond & Dumbo both are fair.
- * Adam & Cruz both are short and Bond & Dumbo both are dark.

But from (2), second possibility is impossible. So the first one is the correct possibility i.e. Adam & Cruz both are tall and Bond & Dumbo both are fair.

Then from (3), Bond is short and handsome.

Also, from (1) and (2), Adam is tall and fair. Also, Dumbo is the person without any preferred traits. Cruz is Dark. Adam and Cruz are handsome. Thus, following are the individual preferred traits:

Cruz - Tall, Dark and Handsome
Adam - Tall and Handsome
Bond - Handsome
Dumbo - None :-)

Hence, Cruz is Tanya's date.

Consider a game of Tower of Hanoi (like the one that you can play on BrainVista).

If the tower has 2 discs, the least possible moves with which you can move the entire tower to another peg is 3.

If the tower has 3 discs, the least possible moves with which you can move the entire tower to another peg is 7.

What is the least possible moves with which you can move the entire tower to another peg if the tower has N discs?

Submitted

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 119
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Answer

There are number of ways to find the answer.

To move the largest disc (at level N) from one tower to the other, it requires $2^{(N-1)}$ moves. Thus, to move N discs from one tower to the other, the number of moves required is
 $= 2^{(N-1)} + 2^{(N-2)} + 2^{(N-3)} + \dots + 2^2 + 2^1 + 2^0$
 $= 2^N - 1$

For N discs, the number of moves is one more than two times the number of moves for N-1 discs. Thus, the recursive function is

$$F(1) = 1$$

$$F(N) = 2*[F(N-1)] + 1$$

where N is the total number of discs

Also, one can arrive at the answer by finding the number of moves for smaller number of discs and then derive the pattern.

For 1 disc, number of moves =

1

For 2 discs, number of moves = 3

For 3 discs, number of moves = 7

For 4 discs, number of moves = 15

For 5 discs, number of moves = 31

Thus, the pattern is $2^N - 1$

A boy found that he had a 48 inch strip of paper. He could cut an inch off every second.

How long would it take for him to cut 48 pieces? He can not fold the strip and also, can not stack two or more strips and cut them together.

Submi **Answer**

47 seconds.

To get 48 pieces, the boy have to put only 47 cuts. i.e. he can cut 46 pieces in 46 seconds.

After getting 46 pieces, he will have a 2 inches long piece. He can cut it into two with just a one cut in 1 second. Hence, total of 47 seconds.

tted by : Kimi

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 120
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

The cricket match between
India and Pakistan was over.

- Harbhajan scored more runs than Ganguly.
- Sachin scored more runs than Laxman but less than Dravid
- Badani scored as much runs as Agarkar but less than Dravid and more than Sachin.
- Ganguly scored more runs than either Agarkar or Dravid.

Each batsman scored 10 runs more than his immediate batsman. The lowest score was 10 runs. How much did each one of them score

Answer

A simple one. Use the given facts and put down all the players in order. The order is as follow with Harbhajan, the highest scorer and Laxman, the lowest scorer.

1. Harbhajan
2. Ganguly

3. Dravid
4. Badani, Agarkar
5. Sachin
6. Laxman

Also, as the lowest score was 10 runs. Laxman must have scored 10, Sachin 20, Badani & Agarkar 30 and so on.

1. Harbhajan - 60 runs
2. Ganguly - 50 runs
3. Dravid - 40 runs
4. Badani, Agarkar - 30 runs each
5. Sachin - 20 runs
6. Laxman - 10 runs

There are 10 statements written on a piece of paper:

1. At least one of statements 9 and 10 is true.
2. This either is the first true or the first false statement.
3. There are three consecutive statements, which are false.
4. The difference between the numbers of the last true and the first true statement divides the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 121
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- number, that is to be found.
5. The sum of the numbers of the true statements is the number, that is to be found.
 6. This is not the last true statement.
 7. The number of each true statement divides the number, that is to be found.
 8. The number that is to be found is the percentage of true statements.
 9. The number of divisors of the number, that is to be found, (apart from 1 and itself) is greater than the sum of the numbers of the true statements.
 10. There are no three consecutive true statements.

Find the minimal possible number?

Submitted

Answer

The numebr is 420.

If statement 6 is false, it creates

a paradox. Hence, **Statement 6 must be true.**

Consider Statement 2:

- If it is true, it must be the first true statement. Otherwise, it creates a paradox.
- If it is false, it must be the second false statement. Otherwise, it creates a paradox.

In both the cases, **Statement 1 is false.**

As Statement 1 is false, **Statement 9 and Statement 10 both are false** i.e. there are three consecutive true statements.

1	2	3	4	5	6	7	8	9	10
Fals e	-	-	-	-	Tru e	-	-	Fals e	Fals e

Let\'s assume that Statement 3 is false i.e. there are no three consecutive false statements. It means that Statement 2 and Statement 8 must be true, else

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 122
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

there will be three consecutive
false statements.

1	2	3	4	5	6	7	8	9	10
Fal se	Tr ue	Fal se	-	-	Tr ue	-	Tr ue	Fal se	Fal se

Also, atleast two of Statements
4, 5 and 7 must be true as
there are three consecutive true
statements.

According to Statement 8, the
number that is to be found is
the percentage of true
statements. Hence, number is
either 50 or 60. Now if
Statement 7 is true, then the
number of each true statement
divides the number, that is to
be found. But 7 and 8 do not
divide either 50 or 60. Hence,
Statement 7 is false which
means that Statement 4 and 5
are true. But Statement 5
contradicts the Statement 8.
Hence, our assumption that
Statement 3 is false is wrong
and **Statement 3 is true** i.e.
there are 3 consecutive false
statements which means that
Statement 8 is false as there

is no other possibilities of 3
consecutive false statements.

Also, **Statement 7 is true** as
Statement 6 is not the last true
statement.

1	2	3	4	5	6	7	8	9	10
Fal se	-	Tr ue	-	-	Tr ue	Tr ue	Fal se	Fal se	Fal se

According to Statement 7, the
number of each true statement
divides the number, that is to
be found. And according to
Statement 5, the sum of the
numbers of the true statements
is the number, that is to be
found. For all possible
combinations **Statement 5 is
false**.

There 3 consecutive true
statements. Hence, **Statement
2 and Statement 4 are true**.

1	2	3	4	5	6	7	8	9	10
F al se	T ru e	T ru e	T ru e	F al se	T ru e	T ru e	F al se	F al se	F al se

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 123
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Now, the conditions for the
number to be found are:

1. The numebr is divisible by 5 (Statement 4)
2. The numebr is divisible by 2, 3, 4, 6, 7 (Statement 7)
3. The number of divisors of the number, that is to be found, (apart from 1 and itself) is not greater than the sum of the numbers of the true statements. (Statement 9)

**The minimum possible
number is 420.**

The divisors of 420, apart from 1 and itself are 2, 3, 4, 5, 6, 7, 10, 12, 14, 15, 20, 21, 28, 30, 35, 42, 60, 70, 84, 105, 140, 210. There are total of 22 divisors. Also, the sum of the numbers of the true statements is 22 ($2+3+4+6+7=22$), which satisfies the third condition. Ankit and Tejas divided a bag of Apples between them.

Tejas said, "It's not fair! You have 3 times as many Apples I

have." Ankit said, "OK, I will give you one Apple for each year of your age." Tejas replied, "Still not fair. Now, you have twice as many Apples as I have." "Dear, that's fair enough as I am twice older than you.", said Ankit.

Ankit went to Kitchen to drink water. While Ankit was in Kitchen, Tejas took apples from Ankit's pile equal to Ankit's age.

Who have more apples now?

Answer

**At the end, Ankit and Tejas,
both have the same number
of apples.**

Let's assume that initially Tejas got N apples and his age is T years. Hence, initially Ankit got $3N$ apples and his age is $2T$ years.

Operation	Ankit's Apples	Tejas's Apples
Initially	$3N$	N

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 124
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahooogroups.com

Ankit gave T apples to Tejas (equals age of Tejas)	$3N - T$	$N + T$
Tejas took 2T apples from Ankit's pile (equals age of Ankit)	$3N - 3T$	$N + 3T$

It is given that after Ankit gave
T apples to Tejas, Ankit had
twice as many apples as Tejas
had.

$$3N - T = 2*(N + T)$$

$$3N - T = 2N + 2T$$

$$N = 3T$$

From the table, at the end Ankit
have $(3N - 3T)$ apples and
Tejas have $(N + 3T)$ apples.

Substituting $N = 3T$, we get
Ankit's apples = $3N - 3T = 9T - 3T = 6T$

Tejas's apples = $N + 3T = 3T + 3T = 6T$

Thus, at the end Ankit and
Tejas, both have the same
number of apples.

On every Sunday Amar, Akbar
and Anthony lunch together at
Preetam-Da-Dhaba where they
order lassi based on following
facts.

1. Unless neither Amar nor Akbar have lassi, Anthony must have it.
2. If Amar does not have lassi, either Akbar or Anthony or both have it.
3. Anthony has lassi only if either Amar or Akbar or both have it.
4. Akbar and Anthony never have lassi together.

Who order(s) lassi?

Answer

Amar and Anthony both have lassi whereas Akbar never does.

Fact (2) can be alternatively
stated that "either Amar or
Akbar or Anthony must have
lassi".

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 125
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahooogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

From Fact (3), it can be inferred
that either Amar or Akbar must
have lassi.

Now, from Fact (1), it is
apparent that Anthony too must
have lassi. But according to
Fact (4), Akbar cannot have
lassi when Anthony does.

Brain Teaser No : 00191

Start with ZBG and ZBGJ. It
should be either "the/then" or
"you/your" combination as they
appear more.

B R W Q H L F K W H J K
Q I B W K

Decipher this sentence.

B R W Q H L F
K W H J K Q I B W K

Q I C E D W
Z B G W K K M I K E

Z B G Q H S
K Z B G J K Z K W

B U U Z B G
J D B H F W.

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 126
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

o b s t a c l
 e s a r e t h o s e

Q I C E D W
 Z B G W K K M I K E

t h i n g s
 y o u s e e w h e n

Z B G Q H S
 K Z B G J K Z K W

y o u t a k
 e y o u r e y e s

B U U Z B G
 J D B H F W.

o f f y o u
 r g o a l s.
 Brain Teaser No : 00001

At what time immediately prior
 to Six O'clock the hands of the
 clock are exactly opposite to
 each other. Give the exact time

in hours, minutes and seconds.

Answer

It is obvious that between 5
 O'clock and 6 O'clock the
 hands will not be exactly
 opposite to each other. It is also
 obvious that the hands will be
 opposite to each other just
 before 5 O'clock. Now to find
 exact time:

The hour hand moves 1 degree
 for every 12 degrees that the
 minute hand moves. Let the
 hour hand be X degree away
 from 5 O'clock. Therefore the
 minute hand is 12X degree
 away from 12 O'clock.

Therefore solving for X

Angle between minute hand
 and 12 O'clock + Angle
 between 12 O'clock and 4
 O'clock + Angle between 4
 O'clock and hour hand = 180
 $12X + 120 + (30 - X) = 180$
 $11X = 30$

Hence $X = 30/11$ degrees
 (hour hand is X degree away
 from 5 O'clock)

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 127
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Now each degree the hour
hand moves is 2 minutes.

Therefore minutes are
 $= 2 * 30/11$
 $= 60/11$
 $= 5.45$ (means 5 minutes 27.16
seconds)

Therefore the exact time at
which the hands are opposite to
each other is
 $= 4 \text{ hrs. } 54 \text{ min. } 32.74 \text{ seconds}$

Ali Baba had four sons, to
whom he bequeathed his 39
camels, with the proviso that
the legacy be divided in the
following way :

The oldest son was to receive
one half the property, the next a
quarter, the third an eighth and
the youngest one tenth. The
four brothers were at a loss as
how to divide the inheritance
among themselves without
cutting up a camel, until a
stranger appeared upon the
scene.

Dismounting from his camel, he
asked if he might help, for he
knew just what to do. The

brothers gratefully accepted his
offer.

Adding his own camel to Ali
Baba's 39, he divided the 40 as
per the will. The oldest son
received 20, the next 10, the
third 5 and the youngest 4. One
camel remained : this was his,
which he mounted and rode
away.

Scratching their heads in
amazement, they started
calculating. The oldest thought :
is not 20 greater than the half of
39? Someone must have
received less than his proper
share ! But each brother
discovered that he had
received more than his due.
How is it possible?

Answer

They took their percentages
from 40 and not from 39, so
they got more than their share.

The oldest son got $1/2$ of 40 =
20 which is 0.5 more

The second son got $1/4$ of 40 =
10 which is 0.25 more

The third son got $1/8$ of 40 = 5

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 128
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

which is 0.125 more
The youngest son got $\frac{1}{10}$ of
 $40 = 4$ which is 0.1 more

And the stranger got $\frac{1}{40}$ of 40 = 1 which is 0.025 more (As he is not supposed to get anything)

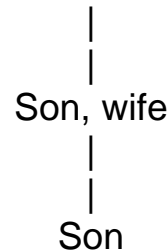
All these fractions add to $= 0.5 + 0.25 + 0.125 + 0.1 + 0.025 = 1$ which stranger took away.
There is a family party consisting of two fathers, two mothers, two sons, one father-in-law, one mother-in-law, one daughter-in-law, one grandfather, one grandmother and one grandson.

What is the minimum number of persons required so that this is possible?

Answer

There are total 2 couples and a son. Grandfather and Grand mother, their son and his wife and again their son. So total 5 people.

Grandfather, Grandmother



A man went into a fast food restaurant and ate a meal costing Rs. 105, giving the accountant a Rs. 500 note. He kept the change, came back a few minutes later and had some food packed for his girl friend. He gave the accountant a Rs. 100 note and received Rs. 20 in change. Later the bank told the accountant that both the Rs. 500 and the Rs. 100 notes were counterfeit.

How much money did the restaurant lose? Ignore the profit of the food restaurant.

Answer

He lost Rs.600

First time restaurant has given food worth Rs.105 and Rs. 395 change. Similarly second time, food worth Rs.80 and Rs.20

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 129
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

change. Here, we are not
 considering food restaurant
 profits.

$$\begin{array}{r}
 \text{S L I D} \\
 \text{E} \\
 - \quad \text{D E A} \\
 \text{N} \\
 \hline
 \text{3 6 5}
 \end{array}$$

Each of seven digits from 0-9
 are represented by a different
 letter above such that the
 subtraction is true.

What word represents 3651?
Answer

3651 represents LENS.

Let's assign possible values to
 each letter and then use trial-n-
 error.

S must be 1.

Then D (under L) must be
 greater than 5. If D is 6, then L

is 0. But then A must be 0 or 1
 which is impossible. Hence, the
 possible values of D are 7, 8 or
 9.

N must be E + 1. Also, D must
 be A + 5 as the possible values
 of D are 7, 8 or 9, D can not be
 (10+A) + 5.

Now using trial-n-error, we get
 S=1, I=2, L=3, A=4, N=5, E=6
 and D=9

$$\begin{array}{r}
 \text{S L I D E} \\
 1 \quad 3 \quad 2 \quad 9 \quad 6 \\
 - \quad \text{D E A N} \\
 - \quad 9 \quad 6 \quad 4 \quad 5 \\
 \hline
 \hline
 \end{array}$$

3 6 5 1
 L E N S
 Hence, 3651 represents LENS.
 Adam, Burzin, Clark and
 Edmund each live in an
 apartment. Their apartments
 are arranged in a row
 numbered 1 to 4 from left to
 right. Also, one of them is the
 landlord.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 130
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

1. If Clark's apartment is not next to Burzin's apartment, then the landlord is Adam and lives in apartment 1.
2. If Adam's apartment is right of Clark's apartment, then the landlord is Edmund and lives in apartment 4.
3. If Burzin's apartment is not next to Edmund's apartment, then the landlord is Clark and lives in apartment 3.
4. If Edmund's apartment is right of Adam's apartment, then the landlord is Burzin and lives in apartment 2.

landlord and lives in apartment 1. Also, other three's apartments will be on the right of his apartment - which contradicts Statement (4) i.e. If Edmund's apartment is right of Adam's apartment, then the landlord is Burzin. Thus, Adam is not the landlord.

Let's assume that Statement (2) is true. Then, Edmund is the landlord and lives in apartment 4. Also, other three's apartments will be on the left of his apartment - which again contradicts Statement (4) i.e. If Edmund's apartment is right of Adam's apartment, then the landlord is Burzin. Thus, Edmund is not the landlord either.

Who is the landlord?

Answer

Clark is the landlord.

Assume each statement true, one at a time and see that no other statement is contradicted.

Let's assume that Statement (3) is true. Then, Clark is the landlord and lives in apartment 3. It satisfies all the statements for
 (1) Adam - (2) Edmund - (3) Clark - (4) Burzin

Let's assume that Statement (1) is true. Then, Adam is the

Hence, Clark is the landlord.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 131
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Similarly, you can assume
Statement (4) true and find out
that it also contradicts.

Brain Teaser No : 00456

B, J and P are related to each
other.

1. Among the three are B's
legal spouse, J's sibling
and P's sister-in-law.
2. B's legal spouse and J's
sibling are of the same
sex.

Who is the married man?

Answer

J is the married man.

Note that a person's sister-in-
law may be the wife of that
person's brother or the sister of
that person's spouse.

There are 2 cases:

1. If B's legal spouse is J,
then J's sibling must be P
and P's sister-in-law must
be B.
2. If B's legal spouse is P,
then P's sister-in-law

must be J and J's sibling
must be B.

It is given that B's legal spouse
and J's sibling are of the same
sex. Also, it is obvious that P's
sister-in-law is female. Then,
B's legal spouse and J's sibling
both must be males.

B's spouse
J's sibling P's
sister-in-law

(male)

(male)

(female)

Case I J
P B

Case II P
B J

Case II is not possible as B & P
are married to each other and
both are male. Hence, J is the
married man.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 132
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Brain Teaser No : 00041

A polygon has 1325 diagonals.
How many vertices does it
have? **Answer**

The formula to find number of
diagonals (D) given total
number of vertices or sides (N)
is

$$D = \frac{N * (N - 3)}{2}$$

Using the formula, we get
 $1325 * 2 = N * (N - 3)$
 $N^2 - 3N - 2650 = 0$

Solving the quadratic equation,
we get $N = 53$ or -50

It is obvious that answer is **53**
as number of vertices can not
be negative.

Alternatively, you can derive
the formula as triangle has 0
diagonals, quadrangle has 2,

pentagon has 5, hexagon has 9
and so on.....

Hence the series is 0, 0, 0, 2, 5,
9, 14, (as diagram with
1,2 or 3 vertices will have 0
diagonals).

Using the series one can arrive
to the formula given above.

Brain Teaser No : 00076

A cube is made of a white
material, but the exterior is
painted black.

If the cube is cut into 125
smaller cubes of exactly the
same size, how many of the
cubes will have atleast 2 of
their sides painted black?

Answer

44

36 of the cubes have EXACTLY
2 of their sides painted black,
but because a cube with 3 of its
sides painted black has 2 of its
sides painted black, you must
also include the corner cubes.
This was a trick question, but

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 133
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

hopefully the title of the puzzle
 tipped you off to this.

Brain Teaser No : 00238

Imagine a triangle of coins on a
 table so that the first row has
 one coin in it and the second
 row has two coins in it and so
 on. If you can only move one
 coin at a time, how many
 moves does it take to make the
 triangle point the other way?

For a triangle with two row it is
 one, for a triangle with three
 rows it is two, for a triangle with
 four rows it is three.

For a triangle with five rows is it
 four?

Submitted **Answer**

It takes 5 moves to make the
 triangle with 5 rows point the
 other way.

0 = a coin that has not been
 moved.

X = the old position of the
 moved coin

8 = the new position of the
 moved coin.

```

      _____X
      _____X X
      _____8 0 0 0 8
      _____0 0 0 0
      _____X 0 0 0 X
      _____8 8
      _____8
  
```

For triangle of any number of
 rows, the optimal number of
 moves can be achieved by
 moving the vertically
 symmetrical coins i.e. by
 moving same number of coins
 from bottom left and right, and
 remaining coins from the top.

For a triangle with an odd
 number of rows, the total
 moves require are :
 $(N^2/4) - (N-4)$ Where $N = 4, 6,$
 $8, 10, \dots$

For a triangle with even number
 of rows, the total moves require
 are :
 $((N^2-1)/4) - (N-4)$ Where $N = 5,$
 $7, 9, 11, \dots$

Thanks to Alex Crosse for
 submitting above formulas.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 134
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Brain Teaser No : 00053

A man is going to an Antique Car auction. All purchases must be paid for in cash. He goes to the bank and draws out \$25,000.

Since the man does not want to be seen carrying that much money, he places it in 15 envelopes numbered 1 through 15. Each envelope contains the least number of bills possible of any available US currency (i.e. no two tens in place of a twenty).

At the auction he makes a successful bid of \$8322 for a car. He hands the auctioneer envelopes number(s) 2, 8, and 14. After opening the envelopes the auctioneer finds exactly the right amount.

How many ones did the auctioneer find in the envelopes? **Answer**

Each envelope contains the money equal to the 2 raised to the envelope number minus 1.

The sentence "Each envelope contains the least number of bills possible of any available US currency" is only to misguide you. This is always possible for any amount !!!

One more thing to notice here is that the man must have placed money in envelopes in such a way that if he bids for any amount less than \$25000, he should be able to pick them in terms of envelopes.

First envelope contains, $2^0 = \$1$
Second envelope contains, $2^1 = \$2$

Third envelope contains, $2^2 = \$4$

Fourth envelope contains, $2^3 = \$8$ and so on...

Hence the amount in envelopes are \$1, \$2, \$4, \$8, \$16, \$32, \$64, \$128, \$256, \$512, \$1024, \$2048, \$4096, \$8192, \$8617

Last envelope (No. 15) contains only \$8617 as total amount is only \$25000.

Now as he bids for \$8322 and

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 135
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

gives envelope number 2, 8
and 14 which contains \$2, \$128
and \$8192 respectively.

Envelope No 2 contains one \$2
bill

Envelope No 8 contains one
\$100 bill, one \$20 bill, one \$5
bill, one \$2 bill and one \$1 bill

Envelope No 14 contains
eighty-one \$100 bill, one \$50
bill, four \$10 bill and one \$2 bill

Hence the auctioneer will find
one \$1 bill in the envelopes.

Brain Teaser No : 00090

The minute and the hour hand
of a watch meet every 65
minutes.

How much does the watch lose
or gain time and by how much?

Answer

The minute and the hour hand
meet 11 times in 12 hours in
normal watch i.e. they meet
after every

$= (12 * 60) / 11$ minutes

$= 65.45$ minutes

$= 65$ minutes 27.16 seconds

But in our case they meet after
every 65 minutes means the
watch is gaining 27.16
seconds.

Brain Teaser No : 00093

There is a number that is 5
times the sum of its digits. What
is this number? Answer is not
0. **Answer**

The number is 45, simply
because

$45 = 5 * (4 + 5)$

How does one find this
number?

Let T be the digit in the tens
place and U be the digit in the
units place. Then, the number
is $10*T + U$, and the sum of its
digits is $T + U$.

The following equation can be
readily written:

$10*T + U = 5*(T + U)$ or

$10*T + U = 5*T + 5*U$ or

$5*T = 4*U$

Thus, $T / U = 4 / 5$

Since T and U are digits, T
must be 4 and U must be 5.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 136
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

There are six boxes containing
5, 7, 14, 16, 18, 29 balls of
either red or blue in colour.
Some boxes contain only red
balls and others contain only
blue.

One sales man sold one box
out of them and then he says, "I
have the same number of red
balls left out as that of blue."

Which box is the one he sold
out?

Answer

Total no of balls = $5 + 7 + 14 + 16 + 18 + 29 = 89$

Total number of balls are odd.
Also, same number of red balls
and blue balls are left out after
selling one box. So it is obvious
that the box with odd number of
balls in it is sold out i.e. 5, 7 or
29.

Now using trial and error
method,
 $(89-29) / 2 = 60/2 = 30$ and
 $14 + 16 = 5 + 7 + 18 = 30$

So box with 29 balls is sold out.

Brain Teaser No : 00218

Ekta got chocolates to give her
friends on her Birthday. If she
gives 3 chocolates to each
friend, one friend will get only 2
chocolates. Also, if she gives 2
chocolates to each friends, she
will left with 15 chocolates.

How many chocolates Ekta got
on her Birthday? and how many
friends are there?

Answer

47 Chocolates and 16 Friends

Let's assume that there are
total C chocolates and F
friends.

According to first case, if she
gives 3 chocolates to each
friend, one friend will get only 2
chocolates.

$$3*(F - 1) + 2 = C$$

Similarly, if she gives 2
chocolates to each friends, she
will left with 15 chocolates.

$$2*F + 15 = C$$

Solving above 2 equations, $F =$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 137
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

16 and C = 47. Hence, Ekta got 47 chocolates and 16 friends
 Pooja and Esha met each other after long time. In the course of their conversation, Pooja asked Esha her age. Esha replied, "If you reverse my age, you will get my husband's age. He is of course older than me. Also, the difference between our age is 1/11th of the sum of our age."

Can you help out Pooja in finding Esha's age?

Answer

Esha's age is 45 years.

Assume that Esha's age is $10X + Y$ years. Hence, her husband's age is $(10Y + X)$ years.

It is given that difference between their age is 1/11th of the sum of their age. Hence,

$$[(10Y + X) - (10X + Y)] = (1/11)[(10Y + X) + (10X + Y)]$$

$$(9Y - 9X) = (1/11)(11X + 11Y)$$

$$9Y - 9X = X + Y$$

$$8Y = 10X$$

$$4Y = 5X$$

Hence, the possible values are $X=4$, $Y=5$ and Esha's age is 45 years.

A fish had a tail as long as its head plus a quarter the length of its body. Its body was three-quarters of its total length. Its head was 4 inches long.

What was the length of the fish?

Submitted

The fish is 128 inches long.

It is obvious that the length of the fish is the summation of lengths of the head, the body and the tail. Hence,

$$\text{Fish (F)} = \text{Head (H)} + \text{Body (B)} + \text{Tail (T)}$$

But it is given that the length of the head is 4 inches i.e. $H = 4$.
 The body is three-quarters of its total length i.e. $B = (3/4)*F$. And the tail is its head plus a quarter the length of its body i.e. $T = H + B/4$. Thus, the equation is

$$F = H + B + T$$

$$F = 4 + (3/4)*F + H + B/4$$

$$F = 4 + (3/4)*F + 4 + (1/4)*(3/4)*F$$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 138
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$F = 8 + (15/16)*F$$
$$(1/16)*F = 8$$
$$F = 128 \text{ inches}$$

Thus, the fish is 128 inches long.

Assume that you have just heard of a scandal and you are the first one to know. You pass it on to four person in a matter of 30 minutes. Each of these four in turn passes it to four other persons in the next 30 minutes and so on.

How long it will take for everybody in the World to get to know the scandal?

Assume that nobody hears it more than once and the population of the World is approximately 5.6 billions.

Answer

Everybody in the World will get to know the scandal in 8 hours.

You came to know of a scandal and you passed it on to 4 persons in 30 minutes. So total

(1+4) 5 persons would know about it in 30 minutes.

By the end of one hour, 16 more persons would know about it. So total of (1+4+16) 21 persons would know about it in one hour.

Similarly, the other (1+4+16+64) persons would have know about it in one and a half hours. (1+4+16+64+256) persons would have know about it in two hours and so on...

It can be deduced that the terms of the above series are the power of 4 i.e. 4^0 , 4^1 , 4^2 , 4^3 and so on upto $(2N+1)$ terms. Also, the last term would be 4^{2N} where N is the number of hours.

Sum of the above mentioned series = $[4^{(2N+1)}-1]/3$

The sum of the series must be 5.6 billions. Hence, equating the sum of the series with 5.6 billions, we get $N=8$ hours.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 139
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Scandals travel FAST !!!

A B C

D

E F G

H

I

Each of the digits from 1 to 9 is
 represented by a different letter
 above. Also, $A + B + C = C + D$
 $+ E = E + F + G = G + H + I =$
 13

Which digit does E represent?

Answer

E represents 4.

Find out all possible groups of
 three different numbers that
 add up to 13 and arrange them
 according to given condition.

If one number is 9, it must go
 with 1 and 3.

If one number is 8, it must go
 with either 1 and 4 or 2 and 3.

If one number is 7, it must go
 with either 1 and 5 or 2 and 4.

If one number is 6, it must go
 with either 2 and 5 or 3 and 4.

It is clear that 9 must go with 1
 and 3. Also, no digit may be
 used in more than two sums.

Hence, there are 2 cases:

Case I: If 8 goes with 1 and 4,
 then 7 goes with 2 and 4, then
 6 goes with 2 and 5.

Case II: If 8 goes with 2 and 3,
 then 7 goes with 2 and 4, then
 6 goes with 3 and 4.

But in case II, 3 is used in three
 sums. Hence, Case I is correct.
 And the possible arrangements
 are:

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 140
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

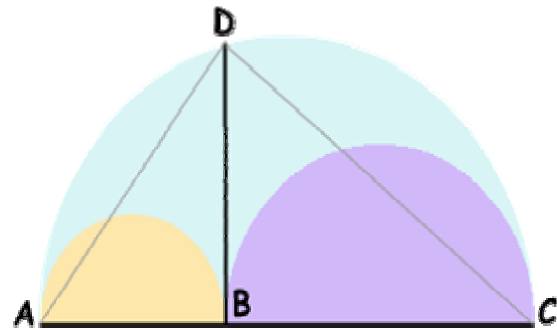
9 3 1
5 6 2
8
7
4 7 2
4 8 1
6
3
5
9

Thus, E must be 4.

A, B and C are three points on a straight line, not necessarily equidistant with B being between A and C. Three semicircles are drawn on the same side of the line with AB, BC and AC as the diameters. BD is perpendicular to the line ABC, and D lies on the semicircle AC.

If the funny shaped diagram between the three semicircles has an area of 1000 square cms, find the length of BD.

Answer



The length of BD is 35.68 cms

There are 3 right-angled triangles - ABD, CBD and ADC.

From ABD, $AB^2 + BD^2 = AD^2$ ----- I

From CBD, $CB^2 + BD^2 = CD^2$ ----- II

From ADC, $AD^2 + CD^2 = AC^2$ ----- III

Adding I and II,
 $AB^2 + BC^2 + 2*BD^2 = AD^2 + CD^2$ ----- IV

FROM III and IV
 $AB^2 + BC^2 + 2*BD^2 = AC^2$
 $AB^2 + BC^2 + 2*BD^2 = (AB+CB)^2$
 $2*BD^2 = 2*AB*CB$
 $BD^2 = AB*CB$
 $BD = \text{SQRT}(AB*CB)$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 141
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Given that funny shaped
 diagram between three
 semicircles has an area of 1000
 square cms.

$$[\pi/2 * (AC/2)^2] - [\pi/2 * (AB/2)^2] - [\pi/2 * (BC/2)^2] = 1000$$

$$\pi/8 * [AC^2 - AB^2 - BC^2] = 1000$$

$$\pi * [(AB+BC)^2 - AB^2 - BC^2] = 8000$$

$$\pi * [2*AB*BC] = 8000$$

$$AB * BC = 4000/\pi$$

Hence BD = SQRT(4000/PI) =
 35.68 cms
 where PI = 3.141592654

Hence, the length of BD is
 35.68 cms.

Brain Teaser No : 00660

Gomzi has 3 timepieces in his
 house - a wall clock, an alarm
 clock and a wristwatch. The
 wristwatch is always accurate,
 whereas the wall clock gains 2
 minutes everyday and the
 alarm clock loses 2 minutes
 everyday.

At exactly midnight last night,

all three watches were showing
 the same time.

If today is 25 July 2003, then on
 which date all three clocks will
 show the same time again?

Answer

**All three clocks will show the
 same time again on midnight
 between 19 July 2004 and 20
 July 2004.**

A clock finishes on round in
 12*60 i.e. 720 minutes.

If a clock gains 2 minutes
 everyday, then it would be 720
 minutes ahead after 360 days.
 Thus, after 360 days, it will
 show the same time again.

Similary, if a clock loses 2
 minutes everyday, then it would
 be 720 minutes behind after
 360 days. Thus, after 360 days,
 it will show the same time
 again.

Thus, after 360 days all three
 clocks will show the same time
 again i.e. midnight between 19
 July 2004 and 20 July 2004.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 142
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have 9 marbles. 8 marbles weigh 1 ounce each, & one marble weighs 1.5 ounces. You are unable to determine which is the heavier marble by looking at them. You have a weighing scale that consists of 2 pans, but the scale is only good for 2 total weighings.

How can you determine which marble is the heaviest one using the scale & in 2 weighings?

Answer

Divide 9 marbles into 3 groups of 3 marbles each.

Take any 2 groups and place them on each pan. If they balance, remove the marbles from the pans, & place any 2 of the marbles from the remaining unweighed group on the pans, 1 on each pan.

If one is heavier, it is the heavier marble, but if they balance, the remaining unweighed marble is the heavier one.

If your first weighing does not balance, remove the marbles from the lighter pan, & place 1 marble on each pan from the heavier pan. The heavier 1 is the 1.5 ounce marble, but if they balance, then the marble from the heavy pan from the first weighing that was not weighed in the second weighing is the heavy 1.

Once a week a wagon driver leaves his hut and drives his wagon to the river dock to pick up supplies for his town. At 4:05 PM, one-fifth of the way to the dock, he passes the Temple. At 4:15 PM, one-third of the way, he passes the Preetam-Da-Dhabaa.

At what time does he reached the dock?

Answer

5:05 PM

At 4:05 PM, the wagon driver passes the temple, one-fifth of the way to the dock. Also, at 4:15 PM, he passes the Preetam-Da-Dhabaa, one-third

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 143
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

of the way. Thus, he travels
 $2/15$ ($1/3 - 1/5$) of the distance
in 10 minutes.

At 4:15 PM, he has already
travelled $1/3$ of the distance.
Thus $2/3$ of the way is
remaining, which can be
travelled in
 $= ((2/3) * 10) / (2/15)$
 $= 50$ minutes

At 4:15, he was at Preetam-Da-
Dhabaa.and remaining way will
take 50 more minutes. Hence,
the driver will reach at 5:05 PM
to the dock.

Brain Teaser No : 00115

Four prisoners escape from a
prison.

The prisoners, Mr. East, Mr.
West, Mr. South, Mr. North
head towards different
directions after escaping.
The following information of
their escape was supplied:

- The escape routes were
North Road, South Road,
East Road and West
Road

- None of the prisoners
took the road which was
their namesake
- Mr. East did not take the
South Road
- Mr.West did not the South
Road
- The West Road was not
taken by Mr. East

What road did each of the
prisoners take to make their
escape**Answer**

Put all the given information
into the table structure as
follow:

	North Road	South Road	East Road	West Road
Mr. North	No			
Mr. South		No		
Mr. East		No	No	No
Mr.		No		No

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 144
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

West				
-------------	--	--	--	--

Now from the table:

Now from table, two things are obvious and they are:

- Mr.North took the South Road
- Mr.East took the North Road

- Mr.West took the East Road
- Mr.South took the West Road

So the answer is:

- Mr.North took the South Road
- Mr.South took the West Road
- Mr.East took the North Road
- Mr.West took the East Road

Put this information into the table, Also keep in mind that the prisoners head towards different directions after escaping.

	Nort h Roa d	Sout h Roa d	East Roa d	Wes t Roa d
Mr. Nort h	No	YES	No	No
Mr. Sout h	No	No		
Mr. East	YES	No	No	No
Mr. West	No	No		No

Shahrukh speaks truth only in the morning and lies in the afternoon, whereas Salman speaks truth only in the afternoon and lies in the morning.

A says that B is Shahrukh.

Is it morning or afternoon and who is A - Shahrukh or Salman?

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 145
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

It is Afternoon and A can be
Salman or Shahrukh. If A is
Salman, he is speaking truth. If
A is Shahrukh, he is lying.

Want to confirm it? Consider
following 4 possible answers
and check for its truthness
individually.

1. It is Morning and A is
Shahrukh
2. It is Morning and A is
Salman
3. It is Afternoon and A is
Shahrukh
4. It is Afternoon and A is
Salman

A rich man died. In his will, he
has divided his gold coins
among his 5 sons, 5 daughters
and a manager.

According to his will: First give
one coin to manager. $\frac{1}{5}$ th of
the remaining to the elder son.
Now give one coin to the
manager and $\frac{1}{5}$ th of the
remaining to second son and
so on..... After giving coins to
5th son, divided the remaining

coins among five daughters
equally.

All should get full coins. Find
the minimum number of coins
he has?

Answer

We tried to find out some
simple mathematical method
and finally we wrote small C
program to find out the answer.
The answer is 3121 coins.

Here is the breakup:

First son = 624 coins

Second son = 499 coins

Third son = 399 coins

Forth son = 319 coins

Fifth son = 255 coins

Daughters = 204 each

Manager = 5 coins

There is a grid of 20 squares by
10 squares. How many different
rectangles are possible?

Note that square is a rectangle.

Answer

11550

The Generic solution to this is:
Total number of rectangles =

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 146
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

(Summation of row numbers) *
 (Summation of column
 numbers)

Here there are 20 rows and 10
 columns or vice versa. Hence,
 total possible rectangles
 $= (20 + 19 + 18 + 17 + 16 + \dots + 3 + 2 + 1) * (10 + 9 + 8 + 7 + \dots + 3 + 2 + 1)$
 $= (210) * (55)$
 $= 11550$

Hence, total 11,550 different
 rectangles are possible.

If you don't believe it, try
 formula on some smaller grids
 like 4x2, 3x2, 3x3 etc...

If $A+B=C$, $D-C=A$ and $E-B=C$,
 then what does $D+F$ stands
 for? Provide your answer in
 letter terms as well as in
 number terms.

Submitted by : David

Answer

J or 10

A simple one.

Assume that each character
 represents the number

equivalent to the position in the
 alphabet i.e. $A = 1$, $B = 2$, $C = 3$,
 $D = 4$ and so on. Now let's
 check our assumption.

$A + B = C$ i.e. $1 + 2 = 3$

$D - C = A$ i.e. $4 - 3 = 1$

$E - B = C$ i.e. $5 - 2 = 3$

Thus, our assumption was
 Correct. Hence, $D + F = J$ i.e. $4 + 6 = 10$

A woman took a certain number
 of eggs to the market and sold
 some of them.

The next day, through the
 industry of her hens, the
 number left over had been
 doubled, and she sold the
 same number as the previous
 day.

On the third day the new
 remainder was tripled, and she
 sold the same number as
 before.

On the fourth day the
 remainder was quadrupled, and
 her sales the same as before.

On the fifth day what had been

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 147
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

left over were quintupled, yet she sold exactly the same as on all the previous occasions and so disposed of her entire stock.

What is the smallest number of eggs she could have taken to market the first day, and how many did she sell daily? Note that the answer is not zero.

Submitted

Answer

She took 103 eggs to market on the first day and sold 60 eggs everyday.

Let's assume that she had N eggs on the first day and she sold X eggs everyday. Putting down the given information in the table as follow.

Day s	Eggs at the start of the day	Egg s Sold	Eggs Remainin g
Day	N	X	N-X

1			
Day 2	2N- 2X	X	2N-3X
Day 3	6N- 9X	X	6N-10X
Day 4	24N- 40X	X	24N-41X
Day 5	120N - 205X	X	120N- 206X

It is given that she disposed of her entire stock on the fifth day. But from the table above, the number of eggs remaining are (120N-206X). Hence,
 $120N - 206X = 0$
 $120N = 206X$
 $60N = 103X$

The smallest value of N and X must be 103 and 60 respectively. Hence, she took 103 eggs to market on the first day and sold 60 eggs everyday. John lives in "Friends Society" where all the houses are in a row and are numbered sequentially starting from 1. His house number is 109.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 148
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Jessy lives in the same society.
 All the house numbers on the
 left side of Jessy's house add
 up exactly the same as all the
 house numbers on the right
 side of her house.

What is the number of Jessy's
 house? Find the minimal
 possible answer.

Answer

**There are 288 houses and
 Jessy's house number is 204.**

Let's assume that in the
 "Friends Society" there are total
 N houses numbered from 1 to
 N and Jessy's house number is
 X.

Now it is given that all the
 house numbers on the left side
 of Jessy's house add up exactly
 the same as all the house
 numbers on the right side of her
 house. Hence,
 $1 + 2 + 3 + \dots + (X-1) = (X+1)$
 $+ (X+2) + (X+3) + \dots + N$

Both the sides of the above
 equations are in A.P. Hence,

using A.P. summation
 formula,

$$\begin{aligned} [(X-1)/2][2*(1) + (X-1-1)] &= [(N-X)/2][2*(X+1) + (N-X-1)] \\ [X-1][(2) + (X-2)] &= [N-X][(2X+2) + (N-X-1)] \\ (X-1)(X) &= (N-X)(N+X+1) \\ X^2 - X &= N^2 + NX + N - NX - X^2 - X \\ X^2 &= N^2 + N - X^2 \\ 2X^2 &= N^2 + N \\ X^2 &= (N^2 + N)/2 \\ X^2 &= N(N+1)/2 \end{aligned}$$

Now, using Trial and Error
 method to find values of N and
 X such that above equation is
 satisfied, we get

1. N = 8, X = 6
2. N = 49, X = 35
3. N = 288, X = 204
4. N = 1681, X = 1189
5. N = 9800, X = 6930

But we require minimal possible
 answer and it is given that
 John's house number is 109. It
 means that there are atleast
 109 houses. Hence, first two
 are not possible. And the
 answer is : there are 288

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 149
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

houses and Jessy's house
number is 204.
Makayla had \$1.19 in change.
None of the coins was a dollar.

Nicole ask her for change for a
dollar, but Makayla could not
make change.

What coins did she have?

Submitted

Answer

As it is given that Makayla had
\$1.19, it means she would have
four pennies. Now, the
remaining \$1.15 in coins must
not add up for exactly a dollar.
Therefore she would not have 4
quarters or 2 quarters and 5
dimes. But she would have
either 1 quarter or 3 quarters.
Hence, there are 2 solutions.

Solution I

1 Quarter, 9 Dimes, 4 Pennies
($0.25 + 0.90 + 0.04 = \$1.19$)

Solution II

3 Quarters, 4 Dimes, 4 Pennies
($0.75 + 0.40 + 0.04 = \$1.19$)
A group of friends went on a
holiday to a hill station. It rained

for 13 days. But when it rained
in the morning, the afternoon
was lovely. And when it rained
in the afternoon, the day was
preceded by clear morning.

Altogether there were 11 very
nice mornings and 12 very nice
afternoons. How many days did
their holiday last?

Answer

The holiday last for 18 days.

Let's assume the number of
days as follows:
Rain in the morning and lovely
afternoon = X days
Clear morning and rain in the
afternoon = Y days
No rain in the morning and in
the afternoon = Z days

Number of days with rain = $X + Y = 13$ days

Number of days with clear
mornings = $Y + Z = 11$ days

Number of days with clear
afternoons = $X + Z = 12$ days

Solving above 3 equations, we
get $X = 7$, $Y = 6$ and $Z = 5$

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 150
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Hence, total number of days on
 holiday = 18 days
 Brain Teaser No : 00299

Substitute digits for the letters
 to make the following Division
 true

$$\begin{array}{r}
 \text{Y F Y} \\
 \hline
 \text{A Y} \mid \text{N E L L Y} \\
 \text{N L Y} \\
 \hline
 \text{P P L} \\
 \text{P N H} \\
 \hline
 \text{N L Y} \\
 \text{N L Y} \\
 \hline
 \text{0 0 0}
 \end{array}$$

Note that the leftmost letter
 can't be zero in any word. Also,
 there must be a one-to-one
 mapping between digits and
 letters. e.g. if you substitute 3
 for the letter N, no other letter

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 151
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

can be 3 and all other N in the
puzzle must be 3.

Submitted by : Calon

Answer

See the pattern of the Y. $AY * Y$
 $= NLY$ i.e. Y is multiplied by Y
and the last digit of the answer
is also Y. Thus, the value of Y
would be 5 or 6.

Also,
 $H=0$ as $L - H = L$
 $P = 2N$ as $P - N = N$
 $L - Y = P = 2N$
 $E - L = p$

Let's find out the minimum
possible values. If $N=1$, then
 $P=2$, $Y=5$, $L=7$ and $E=9$. Note
that the value of Y can not be 6
as it makes $L=8$ and $E=10$
which is not possible. Hence,
 $Y=5$, $N=1$, $P=2$, $L=7$, $E=9$, $H=0$

Now, using trial-n-error or
rather solving $F*AY=PNH$, we
get $F=6$ and $A=3$.

5 6 5
Y F Y

3 5 | 1 9 7 7 5
A Y | N E L L Y

| 1 7 5
| N L Y

2 2 7
P P L

2 1 0
P N H

1 7 5
N L Y

1 7 5
N L Y

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 152
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

| | | |

How many children does Mr.
 TRILOK have?

Answer

TRILOK have 5 children.

Name of the person and
 number of his children are
 related by some pattern.

Assign each vowel following
 values.

A=0 E=1 I=2 O=3 U=4

The number of children to any
 person is the sum of the values
 represented by vowels in his
 name.

RATISH = 0(A) + 2(I) = 2

OM = 3(O) = 3

AMIT = 0(A) + 2(I) = 2

ASHOK = 0(A) + 3(O) = 3

TRILOK = 2(I) + 3(O) = 5

Hence, TRILOK have 5
 children.

Major Jasbir is forming five-
 person Special Task Group.

The group must contain one
 leader, two bomb-experts and
 two soldiers.

P, Q and R are possible bomb-
 experts. R, S and T are
 possible leaders. U, V and W
 are possible soldiers. Also, P
 and R prefers to work with each
 other in the same team. T
 prefers to work only if V works.

How many different possible
 Groups, Major Jasbir can
 make?

Answer

**Major Jasbir can make 8
 different possible groups.**

As 2 bomb-experts to be
 selected from the given 3 and
 also P & R prefers to work
 together, PR must be there in
 all the possible Groups. Also, T
 prefers to work only if V works.
 It doesn't mean that V won't
 work without T.

Hence, possible groups are:

PR - S - UV

PR - S - VW

PR - S - WU

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 154
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

PR - T - UV
PR - T - VW

PQ - R - UV
PQ - R - VW
PQ - R - WU

Hence, there 8 different groups
are possible.

The secret agent X emailed
some code to his head office.
They are "RADAR, LEVEL,
ROTOR, REDIVIDER,
MOTOR". But four of these five
words have something in
common and one is fake.

Can you tell which one is fake?
Ignore the fact that four of the
code-words are of the same
length.

Answer

**The fake code-word is
MOTOR.**

All the code-words except
MOTOR are Palindromes.
Brain Teaser No : 00287

In the village called TALAJA,
only three TV channels are

available - Moon Plus, Mony
and Mee TV.

Out of 4000 TV viewers in the
village, 1500 watch Moon TV,
2000 watch Mony and 2500
watch Mee TV.

Amongst these, 500 viewers
watch Moon Plus and Mony,
800 watch Moon Plus and Mee
TV, and 1000 watch Mony and
Mee TV.

How many viewers watch all
three channels?

Answer

**300 viewers watch all three
channels.**

Let's assume that total X
viewers watch all three
channels.

total viewers who watch only
Moon Plus and Mony = 500-X
total viewers who watch only
Moon Plus and Mee TV = 800-
X
total viewers who watch only
Mony and Mee TV = 1000-X

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 155
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

total viewers who watch only

Moon Plus

$$= 1500 - (500 - X) - (800 - X) - X$$

$$= 200 + X$$

Now whose picture is the man
looking at?

Answer

total viewers who watch only

Mony

$$= 2000 - (500 - X) - (1000 - X) - X$$

$$= 500 + X$$

The man is looking at his
FATHER's portrait.

total viewers who watch only

Mee TV

$$= 2500 - (1000 - X) - (800 - X) - X$$

$$= 700 + X$$

"my father's son" is the man
himself as he do not have any
brothers and sisters. So the
statement reduces to "this
man's son is myself." Now it is
clear that the portrait is of his
father.

Given the following facts:

We know that total viewers are
4000. Summing up all 7 values,

$$X + (500 - X) + (800 - X) + (1000 - X) + (200 + X) + (500 + X) + (700 + X) = 4000$$

$$X + 3700 = 4000$$

$$X = 300$$

1. Dinesh is younger than Farukh and older than Gurmit.
2. Jatin is younger than Chandu and older than Eshrat.
3. Amit is younger than Irfan and older than Chandu.
4. Farukh is younger than Bhavin and older than Hemant.
5. Irfan is younger than Gurmit and older than Jatin.
6. Hemant is older than Gurmit.

Hence, total 300 viewers watch
all three channels.

A man was looking at a portrait.
Someone asked him, "Whose
picture are you looking at?"

He replied, pointing at the
portrait: "Brothers and sisters
have I none, but this man's son
is my father's son."

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 156
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Who is the Youngest?

Answer

Eshrat is the youngest.

Discard whoever are older than someone.

From (1) Gurmit is younger than Dinesh and Farukh.

From (5) Jatin is younger than Irfan and Gurmit.

From (2) Eshrat is younger than Jatin and Chandu.

From above 3 deductions, Eshrat is younger than Dinesh, Farukh, Irfan, Gurmit, Jatin and Chandu.

Also,

From (3) Chandu is younger than Amit and Irfan.

From (4) Hemant is younger than Farukh and Bhavin.

From (6) Gurmit is younger than Hemant.

From above 3 deductions, Gurmit is younger than Farukh, Bhavin and Hemant. Also, Chandu is younger than Amit and Irfan. But as seen earlier,

Eshrat is younger than Gurmit and Chandu.

Hence, Eshrat is the youngest.

Last Saturday Milan went for the late night show and came late. In the morning family members asked him which movie did he see. He gave different answers to everyone.

- He told to his father that he had gone to see MONEY.
- According to his mom, he saw either JOHNY or BABLU.
- His elder brother came to know that he saw BHABI.
- To his sister, he told ROBOT.
- And his grandpa heard that he saw BUNNY.

Thus, Milan gave six movie names, all five letter words. But he saw some other movie with five letter word. Moreover, each of the six movie names mentioned above has exactly two letters common with the movie he saw. (with the same positions)

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 157
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Can you tell which movie did
Milan see?

Answer

Milan saw BOBBY.

The six movie names are -
MONEY, JOHNY, BABLU,
BHABI, ROBOT and BUNNY.

Compare MONEY and JOHNY.
They have O common at the
second place and Y common at
the fifth place. Also, they can't
have two different letters each,
common with the required
movie as the letters in
remaining three places are all
different. Thus, the required
movie must have either O at
the second place or Y at the
fifth place or both.

Similarly, comparing JOHNY
and BUNNY - the required
movie must have either N at the
fourth place or Y at the fifth
place or both. Also, comparing
MONEY and BUNNY - the
required movie must have
either N at the third place or Y
at the fifth place or both.

From the above 3 deduction,
either Y is at fifth place or O is
at the second place and N is at
the third & fourth place. The
later combination is not
possible as BABLU, BHABI &
ROBOT will need at least 3
other letters which makes the
required movie 6 letter long.
Hence, the required movie
must have Y at the fifth place.

Now Y is not there in BABLU
and BHABI at the fifth place
and they have only B common
at the first place. Hence, B
must be the first letter.

As B is at the first place and Y
is at the fifth place and every
movie has exactly 2 letters
common with the required
movie. From BUNNY, the
required movie do not have U
at the second place and N at
the third and fourth place. Now
looking at JOHNY and MONEY,
they must have O common at
the second place.

Using the same kind of
arguments for BABLU, BHABI

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 158
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

and ROBOT, we can conclude
that Milan saw BOBBY.

Jim lies a lot. He tells the truth
on only one day in a week.

One day he said: "I lie on
Mondays and Tuesdays."
The next day he said: "Today is
either Sunday, Saturday or
Thursday."
The next day he said: "I lie on
Fridays and Wednesdays."

On which day of the week does
Jim tell the truth?

Answer

**Jim tells the truth on
Tuesday.**

As Jim tells truth only on one
day in a week, his statement on
day 1 and day 3 both can not
be false. Otherwise he tells
truth on more than one days in
a week. Also, all three
statements are mad on three
consecutive days, statement
made on day 1 and day 3 both
can not be true. Thus, either
the statement made on day 1 or
day 3 is true and other is false.

Also, the statement made on
day 2 must be false i.e. day 1 is
not Saturday, Friday or
Wednesday.

Let's assume that the
statement 1 is true. Then from
the statement 3, day 1 must be
either Friday or Wednesday.
But it is already deduced that
day 1 is not Saturday, Friday or
Wednesday.

Hence, the statement made on
day 1 is false and the last
statement is true. then from the
statement 1, day 3 must be
either Monday or Tuesday. But
it is already deduced that day 1
can not be Saturday i.e. day 3
can't be Monday. Hence, Jim
tells the truth on Tuesday.

4 men can dig 4 holes in 4
days.

How many hours does it take
for 1 man to dig half a hole?

Submitted

Answer

**There is nothing like "HALF
HOLE".**

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 159
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Consider a chessboard with a single Rook. A Rook can move any number of square sideways/forward, but not diagonally.

What is the minimum number of moves the Rook needs to make, in order to pass over all the squares on the chessboard and return to the original position?

Answer

16 moves

As a Rook can move any number of square sideways/forward, but not diagonally and there are 8 rows and 8 columns on the chessboard; the Rook needs minimum 16 moves to pass over all the squares and return to the original position. A farmer needs 8 gallons of water. He has only three unmarked buckets, two 6 gallon and one 11 gallon bucket.

How can he collect 8 gallons of water using three unmarked

buckets? Provide solution with minimal water wastage.

Answer

Here is the solution with 10 gallon water wastage.

OPERATIONS	6	6	11
Fill 6 gallon bucket with water	6	0	0
Empty 6 gallon bucket into 11 gallon bucket	0	0	6
Fill 6 gallon bucket with water	6	0	6
Fill 11 gallon bucket to full using filled 6 gallon bucket. This will leave 1 gallon water in 6 gallon bucket	1	0	11
Empty 11 gallon bucket into second 6 gallon bucket.	1	6	5
Empty 11 gallon bucket - wastage of 5 gallon water	1	6	0
Empty second 6 gallon bucket into 11 gallon bucket	1	0	6
Fill second 6 gallon bucket with water	1	6	6

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 160
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Fill 11 gallon bucket to full using filled second 6 gallon bucket. This will leave 1 gallon water in second 6 gallon bucket	1	1	11
Fill first 6 gallon bucket with 1 gallon water which is in second 6 gallon bucket	2	0	11
Empty 11 gallon bucket into second 6 gallon bucket.	2	6	5
Empty 11 gallon bucket - wastage of 5 gallon water	2	6	0
Fill 11 gallon bucket with water in both the 6 gallon buckets	0	0	11

I bought a car with a peculiar 5 digit numbered licence plate which on reversing could still be read. On reversing value is increased by 78633.

Whats the original number if all digits are different?

Answer

Only 0 1 6 8 and 9 can be read upside down. So on

rearranging these digits we get the answer as 10968.

Jack and Jill are playing cards for a stake of \$1 a game. At the end of the evening, Jack has won 3 games and Jill has won \$3. How many games did they play?

Submitted by : Nathalie Drouin

Answer

They played total of 9 games. Jack won 3 games and Jill won 6 games.

If Jack has won three games and Jill has won \$3, she lost a dollar for each loss, therefore she has won 6 and lost 3 to make \$3 and he won the other 3 that she lost!

Sam and Mala have a conversation.

- Sam says I am certainly not over 40
- Mala says I am 38 and you are atleast 5 years older than me
- Now Sam says you are atleast 39

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 161
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

All the statements by the two
are false. How old are they
really?

Answer

Sam is 41 and Mala is 37.

Let's invert the teaser and read
it like this :

- Sam says I am certainly
over 40
- Mala says I am not 38
and you are atmost 4
years older than me
- Now Sam says you are
atmost 38

From first statement it is clear
that Sam is over 40. Also, from
next 2 statements it is clear that
Mala is less then 38. Hence the
possibilities are :

Sam = 41, 42, 43, 44, 45,

Mala = 37, 36, 35, 34, 33,

It also says that the difference
between their age is maximum
4 years. Hence, there is only
one possible pair i.e. 41 and
37, all other combination have
differences more then 4.

Hence the answer - Sam is 41
and Mala is 37.

A person travels on a cycle
from home to church on a
straight road with wind against
him. He took 4 hours to reach
there.

On the way back to the home,
he took 3 hours to reach as
wind was in the same direction.

If there is no wind, how much
time does he take to travel from
home to church?

Answer

Let distance between home
and church is D.

A person took 4 hours to reach
church. So speed while
travelling towards church is
 $D/4$.

Similarly, he took 3 hours to
reach home. So speed while
coming back is $D/3$.

There is a speed difference of
 $7*D/12$, which is the wind
helping person in 1 direction, &
slowing him in the other

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 162
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

direction. Average the 2
speeds, & you have the speed
that person can travel in no
wind, which is $7D/24$.

Hence, person will take $D / (7D/24)$ hours to travel
distance D which is $24/7$ hours.

Answer is 3 hours 25 minutes
42 seconds

There are N secret agents each
know a different piece of secret
information. They can
telephone each other and
exchange all the information
they know. After the telephone
call, they both know anything
that either of them knew before
the call.

What are the minimum number
of telephone calls needed so
that all of the them know
everything?

Answer

$(2N - 3)$ telephone calls, for $N = 2, 3$

$(2N - 4)$ telephone calls, for $N > 3$

Divide the N secret agents into

two groups. If N is odd, one
group will contain one extra
agent.

Consider first group: agent 1
will call up agent 2, agent 2 will
call up agent 3 and so on.
Similarly in second group,
agent 1 will call up agent 2,
agent 2 will call up agent 3 and
so on. After $(N - 2)$ calls, two
agents in each the group will
know anything that anyone
knew in his group, say they are
Y1 & Y2 from group 1 and Z1 &
Z2 from group 2.

Now, Y1 will call up Z1 and Y2
will call up Z2. Hence, in next
two calls total of 4 agents will
know everything.

Now $(N - 4)$ telephone calls are
required for remaining $(N - 4)$
secret agents.

Total telephone calls require
are
 $= (N - 2) + 2 + (N - 4)$
 $= 2N - 4$

Let's take an example. Say
there are 4 secret agents W, X,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 163
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Y & Z. Divide them into two groups of 2 each i.e. (W, X) and (Y, Z). Here, 4 telephone calls are required.

1. W will call up X.
2. Y will call up Z.
3. W, who knows WX will call up Y, who knows YZ.
4. X, who knows WX will call up Z, who knows YZ.

Take an another example. Say there are 5 secret agents J, K, L, M & N. Divide them into two groups i.e. (J, K) and (L, M, N). Here, 6 telephone calls are required.

1. J will call up K.
2. L will call up M.
3. M will call up N. Now M and N know LMN.
4. J, who knows JK will call up M, who knows LMN.
5. K, who knows JK will call up N, who knows LMN.
6. L will call up to anyone of four.

Mrs. F has invited several wives of delegates to the United Nations for an informal luncheon. She plans to seat her

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 164
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

9 guests in a row such that each lady will be able to converse with the person directly to her left and right. She has prepared the following list.

Mrs. F speaks English only.
Mrs. G speaks English and French.

Mrs. H speaks English and Russian.

Mrs. J speaks Russian only.

Mrs. K speaks English only.

Mrs. L speaks French only.

Mrs. M speaks French and German.

Mrs. N speaks English and German.

Mrs. O speaks English only.

How many distinct seating arrangements are possible?
Give all possible seating arrangements.

Note that ABCD and DCBA are the same.

Answer

126 distinct seating arrangements are possible.

Mrs. J and Mrs. H must be

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

together and Mrs. J must be at
 the end as Mrs. J speaks only
 Russian and Mrs. H is the only
 other Russian speaker.

Mrs. L speaks only French and
 there are two others - Mrs. G
 and Mrs. M - who speak
 French. Here there are 2 cases.

- **CASE A : Mrs. L is at the other end**

If Mrs. L is at the other
 end, either Mrs. G or Mrs.
 M must seat next to her.

- **CASE AA : Mrs. G seats next to Mrs. L**

Then, Mrs. M must
 seat next to Mrs. G
 and Mrs. N must
 seat next to Mrs. M.
 This is because
 Mrs. M speaks
 French and
 German, and Mrs.
 N is the only other
 German speaker.
 Thus, the possible
 seating
 arrangement is
JHxxxNMGL,

where x is the
 English speakers.
 Mrs. F, Mrs. K and
 Mrs. O can be
 arranged in
 remaining 3
 positions in 3!
 different ways i.e. 6
 ways.

- **CASE AB : Mrs. M seats next to Mrs. L**

If so, then either
 Mrs. N or Mrs. G
 must seat next to
 Mrs. M

- **CASE ABA : Mrs. N seats next to Mrs. M**

Thus, the
 possible
 seating
 arrangement
 is
JHxxxxNML,
 where x is the
 English
 speakers.
 Mrs. F, Mrs.
 G, Mrs. K and
 Mrs. O can be

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 165
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

arranged in
 remaining 4
 positions in 4!
 different ways
 i.e. 24 ways.

together. Also, Mrs. L
 must seat between Mrs.
 G and Mrs. M.

- CASE ABB :
**Mrs. G seats
 next to Mrs.
 M**

Thus, the
 possible
 seating
 arrangement
 is
JHxxxxGML,
 where x is the
 English
 speakers.
 Mrs. F, Mrs.
 K, Mrs. N and
 Mrs. O can be
 arranged in
 remaining 4
 positions in 4!
 different ways
 i.e. 24 ways.

- CASE BA : **Mrs. G
 seats left and Mrs.
 M seats right to
 Mrs. L i.e. GLM**

- CASE BAA :
**GLM is at the
 other end**
 Thus, the
 possible
 seating
 arrangement
 is
JHxxxxGLM,
 where x is the
 English
 speakers.
 Mrs. F, Mrs.
 K, Mrs. N and
 Mrs. O can be
 arranged in
 remaining 4
 positions in 4!
 different ways
 i.e. 24 ways.

- CASE B : **Mrs. L does
 not seat at the end**
 It means that Mrs. G, Mrs.
 L and Mrs. M must seat

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 166
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

- **CASE BAB :**
GLM is not at the other end
 Then Mrs. N must seat next to Mrs. M. Now, we have a group of four GLMN where Mrs. G and Mrs. N speak English. Thus, the possible seating arrangement is **JHxxxX**, where x is the individual English speakers and X is the group of four females with English speakers at the both ends. Thus, there are 4! different ways i.e. 24 ways.
 - **CASE BB : Mrs. M seats left and Mrs. G seats right to Mrs. L i.e. MLG**
 Then, Mrs. N must seat next to Mrs. M. Now, we have a group of four NMLG where Mrs. G and Mrs. N speak English. Thus, the possible seating arrangement is **JHxxxX**, where x is the individual English speakers and X is the group of four females with English speakers at the both ends. Thus, there are 4! different ways i.e. 24 ways.
- Thus, total different possible seating arrangements are :
 = 6 (case AA) + 24 (case ABA) + 24 (case ABB) + 24 (case BAA) + 24 (case BAB) + 24 (case BB)
 = 126 seating arrangements

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 167
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Thus, 126 distinct seating arrangements are possible.
What is the smallest number which when divided by 10 leaves a remainder of 9, when divided by 9 leaves a remainder of 8, when divided by 8 leaves a remainder of 7, when divided by 7 leaves a remainder of 6 and so on until when divided by 2 leaves a remainder of 1?

Answer

The smallest such number is 2519.

The easiest way is to find the Least Common Multiple (LCM) of 2, 3, 4, 5, 6, 7, 8 and 9. And subtract 1 from it.

The LCM of 2, 3, 4, 5, 6, 7, 8 and 9 is given by 2520. Hence, the required number is 2519

Three friends divided some bullets equally. After all of them shot 4 bullets the total number of bullets remaining is equal to the bullets each had after division. Find the original number divided.

Answer

18

Assume that initially there were $3X$ bullets.

So they got X bullets each after division.

All of them shot 4 bullets. So now they have $(X - 4)$ bullets each.

But it is given that, after they shot 4 bullets each, total number of bullets remaining is equal to the bullets each had after division i.e. X

Therefore, the equation is

$$3 * (X - 4) = X$$

$$3 * X - 12 = X$$

$$2 * X = 12$$

$$X = 6$$

Therefore the total bullets before division is $= 3 * X = 18$
Brain Teaser No : 00114

Everyday in his business a merchant had to weigh amounts from 1 kg to 121 kgs,

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 168
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

to the nearest kg. What are the
 minimum number of different
 weights required and how
 heavy should they be?

The minimum number is 5 and
 they should weigh 1, 3, 9, 27
 and 81 kgs

Replace each letter by a digit.
 Each letter must be
 represented by the same digit
 and no beginning letter of a
 word can be 0.

$$\begin{array}{r}
 \text{O N E} \\
 \text{O N E} \\
 \text{O N E} \\
 + \text{O N E} \\
 \hline
 \text{T E N}
 \end{array}$$

Answer

Use trial and error. 0 =1, N = 8
 ,E = 2, T = 7

$$\begin{array}{r}
 1 \ 8 \ 2 \\
 1 \ 8 \ 2 \\
 1 \ 8 \ 2 \\
 + \ 1 \ 8 \ 2 \\
 \hline
 7 \ 2 \ 8
 \end{array}$$

A man is on a search for
 Atlantis and comes upon an
 island where all the inhabitants
 know whether Atlantis is still
 around or not.

However, all of the inhabitants
 are either Fairies or Trolls and
 they all use a spell to appear
 humanoid so you cannot tell
 which is which. And the Fairies
 always tell the truth and the
 Trolls always lie, but there is a
 slight complication, some of the
 Fairies have gone insane and
 always lie and some of the
 Trolls have also gone insane
 and always tell the truth.

So here is your task: you must
 ask the first inhabitant that you

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 169
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

come to ONE question and
from that ONE question you
must determine whether Atlantis
is still around or not.

What is the question that you
must ask?

Answer

There are 2 answers to it:

Answer I"Is the statement that
you are reliable equivalent to
the statement that Atlantis is
still around?"

Answer II"Do you believe that
the Statement that you are a
Fairy is equivalent to the
statement that Atlantis is still
around?"

Brain Teaser No : 00276

A frog starts climbing 15 feet
wall. Each hour he climbs 3 feet
and rests for 30 minutes.
During rest, he slips back 2
feet.

How many hours does the frog
take to reach the top? **Answer**

19 hours

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 170
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

A frog climbs 1 foot per 1 1/2
hours as during 30 minutes rest
he slips back 2 feet. This way
he will climb 12 feet in 18
hours. In next hour he will climb
3 more feet i.e. he will complete
15 feet in 19 hours and will
reach the top of the wall.

If a bear eats 65 pounds of fish
every day EXCEPT every 6th
day which it only eats 45
pounds of fish.

If the bear continues this, how
many pounds of fish will it eat in
200 days?

Submitted by : David

Answer

**The bear will eat 12,340
pounds of fish in 200 days.**

It is given that on every 6th day
bear eats 45 pounds of fish i.e.
on day number 6, 12, 18, 24,
.... 192, 198 the bear eats 45
pounds of fish.

Total number of 6th days =
 $200/6 = 33$ (the bear eats 45
pounds)

Hence, the normal days are =

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

200 - 33 = 167 (the bear eats
 65 pounds)

Thus, in 200 days, the bear will
 eat

$$= (167) * (65) + (33) * (45)$$

$$= 10855 + 1485$$

$$= 12,340 \text{ pounds}$$

You have 3 points labelled A, B
 and C. You then have another
 3 points labelled 1, 2 and 3.
 The aim of the puzzle is to
 connect point A with point 1, 2
 and 3. Point B with point 1, 2
 and 3 and point C with point 1,
 2 and 3.

Now while connecting the
 points you have to follow one
 rule - the lines cannot cross
 over each other.

	A	B
C		
	1	2
3		

PS : You can arrange the
 points in order as long as the
 lines DO NOT cross over each
 other.

Answer

There is no solution to it, if you

consider 2 dimensions. It is
 impossible to join each of
 points A, B and C with points 1,
 2 and 3 without lines crossing
 each other.

There is solution, if you
 consider 3 dimensions.
 Consider a circular base and a
 line perpendicular to it passing
 from the center. Now take any
 3 points along the perimeter of
 the circular base as points 1, 2
 and 3. Similarly take any 3
 points along the perpendicular
 line as points A, B and C. Now
 it is quite simple to join each of
 points A, B and C with points 1,
 2 and 3 without any of the lines
 crossing each other.

The other possible 3D structure
 is Pyramid. Take points 1, 2
 and 3 as a vertices of the
 triangular base and points A, B
 and C along the height of the
 Pyramid which is perpendicular
 to the triangular base and
 passing through the apex.

Brain Teaser No : 00477

Suppose five bales of hay are
 weighed two at a time in all

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 171
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

possible ways. The weights in pounds are 110, 112, 113, 114, 115, 116, 117, 118, 120, and 121.

Answer

They weigh 54, 56, 58, 59, 62 pounds.

Let's assume that the weight of five bales are B1, B2, B3, B4 and B5 pounds respectively. Also, $B1 \leq B2 \leq B3 \leq B4 \leq B5$

It is given that five bales of hay are weighed two at a time in all possible ways. It means that each of the bale is weighted four times.

Thus,

$$\begin{aligned} 4*(B1 + B2 + B3 + B4 + B5) &= \\ (110 + 112 + 113 + 114 + 115 + \\ 116 + 117 + 118 + 120 + 121) \\ 4*(B1 + B2 + B3 + B4 + B5) &= \\ 1156 \\ (B1 + B2 + B3 + B4 + B5) &= \\ 289 \text{ pounds} \end{aligned}$$

Now, B1 and B2 must add to 110 as they are the lightest one.

How much does each bale weigh?

Submitted by : Travis Lara

$$B1 + B2 = 110$$

Similarly, B4 and B5 must add to 121 as they are the heaviest one.

$$B4 + B5 = 121$$

From above three equation, we get $B3 = 58$ pounds

Also, it is obvious that B1 and B3 will add to 112 - the next possible higher value. Similarly, B3 and B5 will add to 120 - the next possible lower value.

$$B1 + B3 = 112$$

$$B3 + B5 = 120$$

Substituting $B3 = 58$, we get $B1 = 54$ and $B5 = 62$

From 2 & 3 equations, we get $B2 = 56$ and $B4 = 59$

Hence, the weight of five bales are 54, 56, 58, 59 and 62 pounds.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 172
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Pinto says, "The horse is not Black."

Sandy says, "The horse is either Brown or Grey."

Andy says, "The horse is Brown."

At least one is telling truth and at least one is lying.

Can you tell the color of the horse?

Answer

The color of the horse can be any color other than Black and Brown.

If the color of the horse is Black - all are lying.

If the color of the horse is Brown - all are telling truth.

Thus, the horse is neither Black nor Brown.

If the color of the horse is Grey - Pinto and Sandy are telling truth whereas Andy is lying.

If the color of the horse is other

than Black, Brown and Grey - Pinto is telling truth whereas Sandy and Andy are lying.

You must have noticed that for the given conditions, Pinto is always telling truth whereas Andy is always lying

Brain Teaser No : 00258

Three convicts are brought into the warden's office. He says he can parole one of them and to decide which one he will parole he takes out 5 hats (3 red and 2 white). He stands behind them and places a hat on each one of their heads and puts the other two remaining hats in a drawer.

He tells the prisoners they can look at the others hats and if they can tell which hat they have on they will be the one who is paroled.

The first man looks at the other two and says, "I don't know."

The second man looks at the others hats and says, "I don't

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 173
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

know."

The third man who is blind
says, "Even though I have not
the gift of sight I can tell by
what the others have said that

Answer

**The color of blind man's hat
is Red.**

It is sure that the first man saw
either both Red hats or one
White hat and one Red hat.
There are 6 such possibilities:

1) R R R

2) R R W

3) R W R

4) W R R

5) W R W

6) W W R

In all above possibilities, the
first man won't be sure of the

Now, the blind man knows that
there are just 4 possibilities -

the color of my hat is..."

What color is the blind mans
hat and how does he know?

Submitted

color of his hat.

Now, the second man knows
that the first man saw either
both Red hats or one White hat
and one Red hat. And, he also
knows that its one of the above
6 possibilities. (like we know ;))
But he says, "I don't know".
That means that (2) and (5) are
not the possibilities as in either
case he would be sure of the
color of his hat (Red) by just
looking at the third man's color
of hat (White).

(1), (3), (4), (6) - and in all, the
color of his hat is Red
Three Gold (G) coins, three
Silver (S) coins and three

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 174
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Copper (C) coins are arranged
in a single row as follow:

G S C G
S C G S C

- Only 2 adjacent unlike coins can be moved at any one time.
- The moved coins must be in contact with at least one other coin in line. i.e. no pair of coins is to be moved and placed away from the remaining ones.
- No coin pairs can be reversed i.e. a S-C combination must remain in that order in its new position when it is moved.

What is the minimum number of moves required to get all the coins in following order?

C C C S
S S G G G

Show all moves.

Answer

Minimum number of moves are 8.

M	Order of Coins
o	

v	e											
0			G	S	C	G	S	C	G	S	C	
1	G	S	G	S	C	G	S	C			C	
2	G			S	C	G	S	C			C	S
3	G	S	C			G	S	C			C	S
4	G	S	C	C	S	G	S	C				G
5	G	S	C	C			S	C	S	G		G
6	G	S	C	C	C	S	S			G		G
7			C	C	C	S	S			G	G	S
8			C	C	C	S	S	S	G	G	G	

A fly is flying between two trains, each travelling towards each other on the same track at 60 km/h. The fly reaches one engine, reverses itself immediately, and flies back to the other engine, repeating the process each time.

The fly is flying at 90 km/h. If the fly flies 180 km before the trains meet, how far apart were the trains initially?

Answer

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 175
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Initially, the trains were 240 km apart.

The fly is flying at the speed of 90 km/h and covers 180 km. Hence, the fly flies for 2 hours after trains started.

It's obvious that trains met 2 hours after they started travelling towards each other. Also, trains were travelling at the speed of 60 km/h. So, each train traveled 120 km before they met.

Hence, the trains were 240 km apart initially.

What is the minimum number of numbers needed to form every number from 1 to 7,000?

Example: To form 4884, you would need 2 4s & 2 8s. 4822 requires a 4, a 8, & 2 2s, but you would not count the numbers again that you had already counted from making 4884.

Answer

36

You will need 3 of numbers 0, 7, 8 & 9, & 4 of numbers 1-6. A drinks machine offers three selections - Tea, Coffee or Random (Either tea or Coffee) but the machine has been wired up wrongly so that each button does not give what it claims.

If each drink costs 50p, how much minimum money do you have to put into the machine to work out which button gives which selection?

Submitted

Answer

You have to put just 50p.

Put 50p and push the button for Random. There are only 2 possibilities. It will give either Tea or Coffee.

- If it gives Tea, then the button named Random is for Tea. The button named Coffee is for Random selection. And the button named Tea is for Coffee.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 176
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- If it gives Coffee, then the button named Random is for Coffee. The button named Tea is for Random selection. And the button named Coffee is for Tea.

Thus, you can make out which button is for what by putting just 50p and pressing Random selection first.

You have 13 balls which all look identical. All the balls are the same weight except for one. Using only a balance scale, can find the odd one out with only 3 weighings?

Is it possible to always tell if the odd one out is heavier or lighter than the other balls?

Submitted by : Brett Hurrell

Answer

It is always possible to find odd ball in 3 weighings and in most of the cases it is possible to tell whether the odd ball is heavier or lighter. Only in one case, it is not possible to tell the odd ball is whether heavier or lighter.

1. Take 8 balls and weigh 4 against 4.

- If both are not equal, goto step 2
- If both are equal, goto step 3

2. One of these 8 balls is the odd one. Name the balls on heavier side of the scale as H1, H2, H3 and H4. Similarly, name the balls on the lighter side of the scale as L1, L2, L3 and L4. Either one of H's is heavier or one of L's is lighter. Weigh (H1, H2, L1) against (H3, H4, X) where X is one ball from the remaining 5 balls in initial weighing.

- If both are equal, one of L2, L3, L4 is lighter. Weigh L2 against L3.
 - If both are equal, L4 is the odd ball and is lighter.
 - If L2 is light, L2 is the odd

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 177
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

- ball and is lighter.
 - If L3 is light, L3 is the odd ball and is lighter.
 - If (H1, H2, L1) is heavier side on the scale, either H1 or H2 is heavier.
 Weight H1 against H2
 - If both are equal, there is some error.
 - If H1 is heavy, H1 is the odd ball and is heavier.
 - If H2 is heavy, H2 is the odd ball and is heavier.
 - If (H3, H4, X) is heavier side on the scale, either H3 or H4 is heavier or L1 is lighter. Weight H3 against H4
 - If both are equal, L1 is the odd ball and is lighter.
 - If H3 is heavy, H3 is the odd ball and is heavier.
 - If H4 is heavy, H4 is the odd ball and is heavier.
- 3. One of the remaining 5 balls is the odd one.
 Name the balls as C1, C2, C3, C4, C5. Weight (C1, C2, C3) against (X1, X2, X3) where X1, X2, X3 are any three balls from the first weighing of 8 balls.
 - If both are equal, one of remaining 2 balls is the odd i.e. either C4 or C5.
 Weigh C4 with X1
 - If both are equal, C5 is

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 178
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- the odd ball.
But you can
not tell
whether it is
heavier or
lighter.
- If C4 is heavy,
C4 is the odd
ball and is
heavier.
- If C4 is light,
C4 is the odd
ball and is
lighter.
- If (C1, C2, C3) is
heavier side, one of
C1, C2, C3 is the
odd ball and is
heavier. Weigh C1
and C2.
 - If both are
equal, C3 is
the odd ball
and is
heavier.
 - If C1 is heavy,
C1 is the odd
ball and is
heavier.
- If C2 is heavy,
C2 is the odd
ball and is
heavier.
- If (C1, C2, C3) is
lighter side, one of
C1, C2, C3 is the
odd ball and is
lighter. Weigh C1
and C2.
 - If both are
equal, C3 is
the odd ball
and is
lighter.
 - If C1 is light,
C1 is the odd
ball and is
lighter.
 - If C2 is light,
C2 is the odd
ball and is
lighter.

How many squares are there in
a 5 inch by 5 inch square grid?
Note that the grid is made up of
one inch by one inch squares.
*Submitted by : Kristin
Monroe*

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 179
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

Answer

There are 55 squares in a 5 by 5 grid.

There are 25 squares of one grid.

There are 16 squares of four grids i.e. 2 by 2

There are 9 squares of nine grids i.e. 3 by 3

There are 4 squares of sixteen grids i.e. 4 by 4

There is 1 square of twenty-five grids i.e. 5 by 5

Hence, there are total $25 + 16 + 9 + 4 + 1 = 55$ squares.

You must have noticed one thing that total number squares possible of each size is always a perfect square i.e. 25, 16, 9, 4, 1

For a grid of N by N, the possible number of squares are
 $= N^2 + (N - 1)^2 + (N - 2)^2 + (N - 3)^2 + \dots + 3^2 + 2^2 + 1^2$

For 1 by 1 grid, total squares = $1^2 = 1$

For 2 by 2 grid, total squares =

$$2^2 + 1^2 = 5$$

For 3 by 3 grid, total squares = $3^2 + 2^2 + 1^2 = 14$

For 4 by 4 grid, total squares = $4^2 + 3^2 + 2^2 + 1^2 = 30$

For 5 by 5 grid, total squares = $5^2 + 4^2 + 3^2 + 2^2 + 1^2 = 55$

Five horses ran in the race.

- There were no ties.
- Sikandar did not come first.
- Star was neither first nor last.
- Mughal Glory came in one place after Sikandar.
- Zozo was not second.
- Rangila was two place below Zozo.

In what order did the horses finish?

Answer

It's simple.

Let's find the possible places horses can finish. Possibilities are:

Sikandar - 2,3,4 (not 5th as Mughal Glory came one place after him)

Star - 2,3,4

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 180
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Mughal Glory - 3,4,5
Zozo - 1,3 (not 4th & 5th as
Rangila is two place after him)
Rangila - 3,5

So the result is:

- 1 Zozo
- 2 Star
- 3 Rangila
- 4 Sikandar
- 5 Mughal Glory

If you added together the
number of 2's in each of the
following sets of numbers,
which set would contain the
most 2's: 1-333, 334-666, or
667-999?

Answer

1-333

The reason why is because
200-299 each begins with a 2!

If one person sends the e-mail
to two friends, asking each of
them to copy the mail and send
it to two of their friends, those in
turn send it to two of their
friends and so on.

How many e-mails would have

been sent by the time it did 30
sets?

Answer

2147483646

First person sent the mail to 2
persons. Those 2 sent the mail
to 2 persons each, total 4
persons. Now, those 4 person
sent mail to total 8 persons,
then 8 to 16 persons, 16 to 32
persons and so on.... Hence, it
a series of 2, 4, 8, 16, 32 upto
30 numbers

It is a Geometric series with
common ratio 2 and first
number is also 2. Summation of
such series is given by $A * (R^n - 1) / (R - 1)$ where

A = First term

R = Common Ratio

n = total numbers

So total number of times mail
sent by the time it did 30 sets

$$= 2 * (2^{30} - 1) / (2 - 1)$$

$$= 2 * (1073741824 - 1)$$

$$= 2 * 1073741823$$

$$= 2147483646$$

For the sake of simplicity,
consider two-dimension i.e view

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 181
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

sphere as a two dimensional
circle with diameter 40 cms.

From Figure I, (40 cms
diameter sphere)

$$OC^2 = OD^2 + CD^2$$

$$OC^2 = 20^2 + 20^2$$

$$OC = 28.28427 \text{ cms}$$

Also, X is the closest point to
origin O on the sphere.

$$CX = 20 \text{ cms (radius)}$$

$$OX = OC - CX$$

$$OX = 28.28427 - 20$$

$$OX = 8.28427 \text{ cms}$$

From Figure II, (7 cms
diameter sphere)

$$OP^2 = OQ^2 + PQ^2$$

$$OP^2 = (3.5)^2 + (3.5)^2$$

$$OP = 4.94974 \text{ cms}$$

Also, Y is the farthest point to
origin O on the sphere.

$$PY = 3.5 \text{ cms (radius)}$$

$$OY = OP + PY$$

$$OY = 4.94974 + 3.5$$

$$OY = 8.44974 \text{ cms}$$

Now, as $OY > OX$ i.e. smaller
sphere requires more space
than the space available.

Hence, smaller sphere of 7 cms

diameter can not pass through
the space between the big
sphere, the wall and the floor.

**The puzzle can be solved by
another method.**

Draw a line tangent to the big
sphere at the point X such that
X is the closest point to the
origin O on sphere. The tangent
will cut X and Y axes at A and
B respectively such that
 $OA=OB$. [See Fig III] From
above, $OX=8.28427 \text{ cms}$.

From the right angle triangle
OAB, we can deduct that
 $OA = OB = 11.71572 \text{ cms}$
 $AB = 16.56854 \text{ cms}$

Now, the diameter of the
inscribed circle of right angle
triangle is given by $d = a + b - c$
where $a \leq b < c$

The maximum possible
diameter of the circle which can
pass through the space
between the big sphere, the
wall and the floor is
 $= OA + OB - AB$
 $= 11.71572 + 11.71572 -$
 16.56854

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 182
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

= 6.86291 cms

Hence, the sphere with 7 cms
diameter can not pass through
the space between the big
sphere, the wall and the floor.
Brain Teaser No : 00347

At the entrance to a members
club stands a stranger seeking
admission. A friend told him
that it's easy to get in. You just
have to answer a question
correctly! Answering wrong,
however, will result in being
shot!

To live a little longer, the man
waits in a back alley near the
entrance for people to go in.
After a while a man comes to
the entrance. The door warden
asks him: "Twelve?" to which
he replies "Six!" and goes in.

"That's easy." our friend thinks,
but he waits a little longer.

Another man comes to the
door. "Six?" the door warden
asks, to which he replies
"Three!" and goes in.

"That's too good to be true" our
friend thinks, and he was right.
Because, when asked "Four?",
he answered "Two!" and was
found dead in the alley.

What was the correct answer?
*Submitted by : Milind
Gadagkar* **Answer**

**The correct answer was
"Four".**

The answer is the number of
letters in the word spoken by
the door warden.

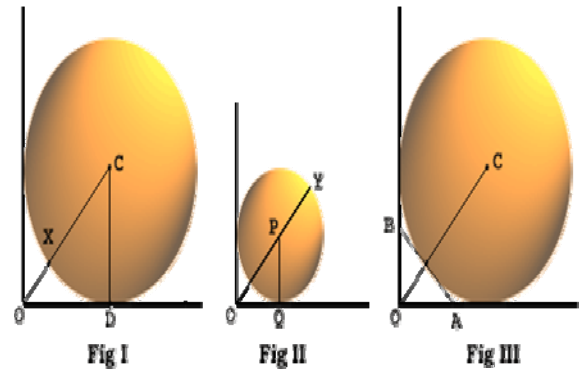
"Twelve" contains "Six" letters
i.e. T, W, E, L, V, E
"Six" contains "Three" letters
i.e. S, I, X
Similarly, "Four" contains
"Four" letters i.e. F, O, U, R
There is a perfect sphere of
diameter 40 cms. resting up
against a perfectly straight wall
and a perfectly straight floor i.e.
the wall and the floor make a
perfect right angle.

Can a perfect sphere of
diameter 7 cms. pass through
the space between the big

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 183
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahooogroups.com

sphere, the wall and the floor?
Support your answer with valid
arguments. Don't submit just
"Yes" or "No".



Sarika multiplied 414 by certain
number and obtained 69958 as
the answer. But she found that
there is some error in the
answer - both the 9s in the
answer are wrong and all the
other digits are correct.

Can you find the correct
answer?

Answer

The correct answer is 60858.

If you divide 69958 by 414, you
will get 168.98. Hence, assume
some three digit number and
multiply it by 414 and use 6**58
as the answer.

Assume three digit number
such that

$$\begin{array}{r}
 * * * \\
 414 \\
 \hline
 * * * \\
 * * * 0 \\
 * * * 0 0 \\
 \hline
 6 * * 5 8
 \end{array}$$

It is obvious that the last digit of
the assumed number must be
7.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 184
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahooogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

$\begin{array}{r} * * 7 \\ 4 1 4 \\ \hline * * 8 \\ * * 7 0 \\ * * 8 0 0 \\ \hline 6 * * 5 8 \end{array}$	$\begin{array}{r} 1 4 7 \\ 4 1 4 \\ \hline 5 8 8 \\ 1 4 7 0 \\ 5 8 8 0 0 \\ \hline 6 0 8 5 8 \end{array}$
---	---

Now, the second last digit of the assumed number must be 4 or 9. Also, the first digit of the assumed number must be 1 as the first digit of the answer is 6. Using trial and error for above two conditions, the answer is

Find the least number which when divided by 35, leaves remainder 25; when divided by 45, leaves remainder 35 and when divided by 55, leaves remainder 45.

Answer

3455

The answer is LCM of (35, 45, 55) minus 10.
 LCM of (35, 45, 55) is 3465.
 Hence, the answer is 3455.
 The ratio of Boys to Girls is 6:4.
 60% of the boys and 40% of the girls take lunch in the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 185
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

canteen. What % of class takes
lunch in canteen?

Answer

Assume there are 6X boys and
4X Girls

Total Students taking lunch in
canteen
= (6X)(60/100) + (4X)(40/100)
= 36(X/10) + 16(X/10)
= 52(X/10)

Total students are = 6X + 4X =
10X

% of class taking lunch in
canteen
= ((52X/10) * 100) / 10X
= 52 %

In the following multiplication,
certain digits have been
replaced with asterisks (*).
Replace all the asterisks such
that the problem holds the
result.

$$\begin{array}{r}
 * * 7 \\
 \times 3 * * \\
 \hline
 * 0 * 3 \\
 * 1 * \\
 * 5 * \\
 \hline
 * 7 * * 3
 \end{array}$$

Answer

A simple one.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

$$\begin{array}{r}
 1 \quad 1 \quad 7 \\
 \times 3 \quad 1 \quad 9 \\
 \hline
 1 \quad 0 \quad 5 \quad 3 \\
 1 \quad 1 \quad 7 \\
 3 \quad 5 \quad 1 \\
 \hline
 3 \quad 7 \quad 3 \quad 2 \quad 3
 \end{array}$$

How long would it take you to
count 1 billion orally if you could
count 200 every minute and
were given a day off every four
years?

Assume that you start counting
on 1 January 2001.

Submitte **Answer**

**9 Years, 187 Days, 5 Hours,
20 minutes**

As you can count 200 per
minute, to count 1 billion you
require
= 1,000,000,000/200 minutes
= 5,000,000 minutes

= 83,333.3333 hours
= 3,472.2222 days
= 9.512937 years
= 9 Years, 187 Days, 5 Hours,
20 minutes

Note that a day off every four
year will be a Leap day. Hence,
no need to consider leap year.
dFive students - Akash,
Chintan, Jignesh, Mukund and
Venky - appeared for an exam.
There were total five questions
- two multiple choice (a, b or c)
and three true/false questions.
They answered five questions
each and answered as follow.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 187
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

III	IV	I	II
		V	

Chintan		c	b
True	True	False	

Akash		c	c
True	True	True	

Jignesh		a	c
False	True	True	

Mukund		b	a
True	True	False	

Venky		b	b
True	False	True	

Also, no two students got the same number of correct answers.

Can you tell which are the correct answers? What are their individual score?

Answer

The correct answers are b, a, True, False and False. Also, the scores are Jignesh (0), Akash (1), Chintan (2), Venky (3) and Mukund (4).

As no two students got the same number of correct answers, the total number of correct answers must be either 15 (1+2+3+4+5) or 10 (0+1+2+3+4).

Let's find out the maximum number of correct answers possible from the answers given by them.

For Question I = 2 (b or c)

For Question II = 2 (b or c)

For Question III = 4 (True)

For Question IV = 4 (True)

For Question V = 3 (True)

Thus, the maximum number of correct answers possible are 15 (2+2+4+4+3) which means that Akash would have given all correct answers as only he answered True for questions III, IV and V. But then Chintan and Jignesh would have exactly 3

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 188
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

correct answers. And also,
Mukund and Venky would have
2 correct answers. So **no one
got all five correct**. One can
also arrive at this conclusion by
trial-and-error, but that would
be bit lengthy.

Now, it is clear that total
number of correct answers are
10 (0+1+2+3+4). Questions III
and IV both can not be False. If
so, total number of correct
answers would not be 10. So
the student who got all wrong
can not be Chintan, Akash and
Mukund.

If Venky got all wrong, then
Chintan, Jignesh and Mukund
each would have atleast 2
correct answers. It means that
Akash would have to be the
student with only one correct
answer and the correct
answers for questions I and II
would be a and a respectively.
But then the total number of
correct answers would be 1 (a)
+ 1 (a) + 1 (False) + 4 (True) +
2 (False) = 9.

Thus, Jignesh is the student

with all wrong answers. The
correct answers are b, a, True,
False and False. Also, the
scores are Jignesh (0), Akash
(1), Chintan (2), Venky (3) and
Mukund (4).

Eleven boys and girls wait to
take their seats in the same row
in a movie theater. There are
exactly 11 seats in the row.

They decided that after the first
person sits down, the next
person has to sit next to the
first. The third sits next to one
of the first two and so on until
all eleven are seated. In other
words, no person can take a
seat that separates him/her
from at least one other person.

How many different ways can
this be accomplished? Note
that the first person can choose
any of the 11 seats.

Answer

**There are 1024 different
ways.**

This is the type of Brain Teaser
that can be solved using the

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 189
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

method of induction.

If there is just a one person and one seat, that person has only one option.

If there are two persons and two seats, it can be accomplished in 2 different ways.

If there are three persons and three seats, it can be accomplished in 4 different ways. Remember that no person can take a seat that separates him/her from at least one other person.

Similarly, four persons and four seats produce 8 different ways. And five persons with five seats produce 16 different ways.

It can be seen that with each additional person and seat, the different ways increase by the power of two. For six persons with six seats, there are 32 different ways.

For any number N , the different possible ways are $2^{(N-1)}$

Thus, for 11 persons and 11 seats, total different ways are 2^{10} i.e. 1024

The secret agent X emailed a code word to his head office. They are "AIM DUE OAT TIE MOD". But four of these five words are fake and only one contains the information.

The agent X also mailed a sentence as a clue - if I tell you any one character of the code word, you would be able to tell the number of vowels in the code word.

Can you tell which is the code word?

Answer

The code word is TIE.

If you were told any one character of MOD, then you would not be able to determine whether the number of vowels are one or two. e.g. if you were told M, there are two words with M - AIM with 2 vowels and MOD with 1 vowel. So you

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 190
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

would not be able to say the number of vowels. Same arguments can be given for characters O and D.

Hence, the word with any one of M, O or D is not a code word i.e. AIM, DUE, OAT and MOD are not the code word. Thus, TIE is the code word.

T : two words - TIE and OAT, both with 2 vowels

I : two words - TIE and AIM, both with 2 vowels

E : two words - TIE and DUE, both with 2 vowels.

Brain Teaser No : 00361

Four men - Abraham, Bobby, Clinton and Denial - are standing in a straight line.

1. One man is fair, handsome and unscarred.
2. Two men who are not fair, are each standing next to Abraham.
3. Bobby is the only man standing next to exactly one handsome man.

4. Clinton is the only man not standing next to exactly one scarred man.

Who is fair, handsome and unscarred?

Answer

Clinton is fair, handsome and unscarred.

From (2), both the men standing next to Abraham are not fair. Also, exactly one man is fair, handsome and unscarred. Hence, there are two cases:

Case 1 :: ? (N, ?, ?) : Abraham (Y, Y, N) : ? (N, ?, ?) : ? (?, ?, ?)

Case 2 :: ? (N, ?, ?) : Abraham (?, ?, ?) : ? (N, ?, ?) : ? (Y, Y, N)

Note the representation - Name (Fair, Handsome, Scarred). "Y" stands for Yes and "N" stands for No. Abraham (Y, Y, N) means Abraham is Fair, Handsome and Unscarred.

It is clear that either Abraham or the man at the extreme right

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 191
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

is fair, handsome and
unscarred.

From (4), it is deduced that
Clinton is standing next to
unscarred man and each of the
other men standing next to
exactly one scarred man.

Case 1 :: Clinton (N, ?, N) :
Abraham (Y, Y, N) : ? (N, ?, Y) :
? (?, ?, Y)
Case 2 :: ? (N, ?, Y) : Abraham
(?, ?, Y) : ? (N, ?, N) : Clinton
(Y, Y, N)

From (3), Bobby is the only
man standing next to exactly
one handsome man. But in
Case 1, Clinton is standing next
to exactly one handsome man.
Hence, Case 1 is not possible
and Case 2 is the correct one.

Case 2 :: ? (N, ?, Y) : Abraham
(?, ?, Y) : ? (N, ?, N) : Clinton
(Y, Y, N)

Again from (3) and (4), there
are 2 possibilities as shown
below.

Case 2a :: Denial (N, N, Y) :

Abraham (?, N, Y) : Bobby (N,
N, N) : Clinton (Y, Y, N)
Case 2b :: Bobby (N, N, Y) :
Abraham (?, Y, Y) : Denial (N,
N, N) : Clinton (Y, Y, N)

Thus, Clinton is fair, handsome
and unscarred. Also, Abraham
may be either fair or not fair.
An orange colored glass has
Orange juice and white colored
glass has Apple juice both of
equal volumes. 50ml of the
orange juice is taken and
poured into the white glass.
After that similarly, 50ml from
the white glass is poured into
the orange glass.

Of the two quantities, the
amount of apple juice in the
orange glass and the amount of
orange juice in the white glass,
which one is greater and by
how much?

Answer

The two quantities are equal.

Solve it by taking example.
Let's assume that both glasses
contain 450 ml of juice each.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 192
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Now, 50ml of the orange juice is taken and poured into the White glass. Hence, orange colored glass contains 400 ml of Orange juice and white glass contains 450 ml of Apple juice and 50 ml of Orange juice i.e. total of 500 ml from white glass contains 450 ml of Apple juice and 50 ml of Orange juice. It means that **every 50 ml from white glass contains 45 ml of Apple juice and 5 ml of Orange juice.**

Similary, 50 ml of juice from white glass is poured into orange glass. Now this 50 ml is not a pure apple juice. It contains 45 ml of Apple juice and 5 ml of Orange juice.

Hence, Orange glass contains 405 ml of Orange juice and 45 ml of Apple juice. Similary, white glass contains 405 ml of Apple juice and 45 ml of Orange juice.

	Orange Glass	White Glass
--	---------------------	--------------------

	Orange Juice	Apple Juice	Orange Juice	Apple Juice
Initially	450 ml	0 ml	0 ml	450 ml
50 ml from Orange Glass is poured into White Glass	400 ml	0 ml	50 ml	450 ml
50 ml from White Glass is poured into Orange Glass	405 ml	45 ml	45 ml	405 ml

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 193
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

s				
---	--	--	--	--

Now it is clear that the amount of apple juice in the orange glass and the amount of orange juice in the white glass are the same.

P.S. Here we assumed 450 ml as initial quantity in both the glasses just for simplicity. You can try the same by assuming any other number. But the answer is the same.

Brain Teaser No : 00433

Annie, Bunnie, Candy and Dina visited Edy on 14th February.

- The time of each visit was as follows:
 - Annie at 8:00
 - Bunnie at 9:00
 - Candy at 10:00
 - Dina at 11:00
 Each time mentioned above may be either AM or PM.
- Candy did not visit Edy between Bunnie and Dina.

- At least one female visited Edy between Annie and Bunnie.
- Annie did not visit Edy before both Candy and Dina.

Can you tell at what time did they individually visit Edy?

Answer

Bunnie (9:00AM) - Dina (11:00AM) - Annie (8:00PM) - Candy (10:00PM)

From the given data, it is clear that at least one female visited Edy in the morning and at least one female visited Edy in the evening. Also, from (4), Annie did not visit Edy first. It means that Annie visited Edy at 8:00 PM

From (3), Bunnie must have visited Edy at 9:00 AM. Also, either Candy or Dina or both visited Edy in the morning.

But from (2), only Dina must have visited Edy in the morning at 11:00 AM and hence, Candy visited Edy at 10:00 PM.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 194
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

The order of visits must be:
Bunnie (9:00AM) - Dina
(11:00AM) - Annie (8:00PM) -
Candy (10:00PM)

In training for a competition,
you find that swimming
downstream (with the current)
in a river, you can swim 2 miles
in 40 minutes, & upstream
(against the current), you can
swim 2 miles in 60 minutes.

How long would it take you to
swim a mile in still water?

Answer

You are able to swim
downstream at 3 miles an hour,
& upstream at 2 miles an hour.
There is a difference of 1 mile
an hour, which is the river
helping you in 1 direction, &
slowing you in the other
direction.

Average the 2 rates, & you
have the rate that you can swim
in still water, which is 2.5 miles
an hour.

Brain Teaser No : 00570

You can thus swim a mile in still
water in 24 minutes.

Father's age is three years
more than three times the son's
age. After three years, father's
age will be ten years more than
twice the son's age.

What is the father's present
age?

Answer

Let son's present age is X
years.

Hence, father's present age is
(3X + 3) years.

After 3 years, son's age will be
(X + 3) years.
and father's age will be (3X + 6)
years.

But given that after 3 years
father's age will be ten years
more than twice the son's age.
 $(3X + 6) = 2 * (X + 3) + 10$
 $3X + 6 = 2X + 16$
 $X = 10$

Therefore, father's present age
is 33 years

.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 195
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

- A is the father of two children - B and D who are of different sexes.
- C is B's spouse.
- E is the same sex as D.
- B and C have the two children - F who is the same sex as B and G who is the same sex as C.
- E's mother, H who is married to L, is the sister of D's mother, M.
- E and E's spouse, I have two children - J and K who are the same sex as I.

Note that no persons have married more than once. Also, there are more number of females than males. Can you tell how many females are there?

Answer

There are 7 females and 6 males.

Assume that there are four sexes - male, female, X and Y.
Prepare the following tree
based on the data given :

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

sister

$$\begin{array}{r} L(m) - H(f) - - - - - \\ - - - - - M(f) - \\ A(m) \end{array}$$

$$\begin{array}{c} | \\ | \\ | \\ | \end{array} \quad \begin{array}{c} | \\ | \\ | \\ | \end{array}$$

$$\begin{array}{r} E(x) - I(y) \\ D(x) \quad B(y) - C(x) \end{array}$$

$$\begin{array}{c} | \\ | \\ | \\ | \end{array} \quad \begin{array}{c} | \\ | \\ | \\ | \end{array}$$

$$\begin{array}{r} J(y) \quad K(y) \\ F(y) \quad G(x) \end{array}$$

It is clear that there are
 altogether 13 persons - 2
 males, 2 females, 4 Xs and 5
 Ys.

It is given that there are more
 number of females than male.

Hence, all Y must represent
 female. Thus, there are 7
 females and 6 males.

A positive integer that, when
 added to 1000 gives a sum
 which is greater than when
 multiplied by 1000.

Find the positive integer.

Answer

The positive integer is 1.

Sum of 1 and 1000 = 1 + 1000
 = 1001

Multiplication of 1 and 1000 = 1
 * 1000 = 1000

Thus, sum of 1 and 1000 is
 greater than the multiplication
 of 1 and 1000.

Mr. D'souza has bought four
 cars - Merc, Honda, Ford, Zen -
 as presents for his sons'
 birthdays, all of which are next
 week. Given the following
 information, what will each son
 get?

Alan will not get the Honda
 unless Barry gets the Merc and
 Denzil gets the Ford. Barry will
 not get the Ford unless Carl

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 197
 Please check out the files section of this group.It contains very
 useful files needed for your preparation. Very Useful for freshers.
 To directly subscribe through e-mail, just send a blank mail to :
 software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

gets the Zen and Alan gets the Merc. Denzil will not get the Zen unless Alan gets the Honda and Barry gets the Merc. Alan will not get the Merc unless Carl gets the Zen and Denzil gets the Ford. Barry will not get the Merc unless Alan gets the Zen and Denzil gets the Ford. Alan will not get the Zen unless Barry gets the Honda and Carl gets the Merc. Carl will not get the Zen unless Barry gets the Honda and Alan gets the Ford. Alan will not get the Ford unless Barry gets the Zen and Denzil gets the Honda. Carl will not get the Merc unless Denzil gets the Honda.

Answer

Let's put given 9 information in a table. The person in **Bold Font** will not get the corresponding car unless the persons in Normal Font get the corresponding cars. Also, the person will *Italics* will get the remaining car.

	Merc	Honda	Ford	Zen
		a		

1	Barry	Alan	Denzil	<i>Carl</i>
2	Alan	<i>Denzil</i>	Barry	Carl
3	Barry	Alan	<i>Carl</i>	Denzil
4	Alan	<i>Barry</i>	Denzil	Carl
5	Barry	<i>Carl</i>	Denzil	Alan
6	Carl	Barry	<i>Denzil</i>	Alan
7	<i>Denzil</i>	Barry	Alan	Carl
8	<i>Carl</i>	Denzil	Alan	<i>Barry</i>
9	Carl	Denzil	?	?

Now, let's assume that Alan gets the Merc. Then from (4), Barry gets the Honda, Denzil gets the Ford and Carl gets the Zen. But from (7), Carl will not get the Zen unless Barry gets the Honda and Alan gets the Ford. Thus, it contradicts the original assumption. Hence, Alan will not get the Merc.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

Let's assume that Alan gets the Honda. Then from (1), Barry gets the Merc, Denzil gets the Ford and Carl gets the Zen. But from (5) or from (7), it contradicts the original assumption. Hence, Alan will not get the Honda.

Let's assume that Alan gets the Ford. Then from (8), Carl gets the Merc, Denzil gets the Ford and Barry gets the Zen - which does not contradict any of the statement.

Similaly, you can assume that Alan gets the Zen. (which is contradictory to (9))

Hence, Alan gets the Ford, Barry gets the Zen, Carl gets the Merc and Denzil gets the Honda.

Yesterday in a party, I asked Mr. Shah his birthday. With a mischievous glint in his eyes he replied. "The day before yesterday I was 83 years old and next year I will be 86."

Can you figure out what is the Date of Birth of Mr. Shah?

Assume that the current year is 2000.

Answer

Mr. Shah's date of birth is 31 December, 1915

Today is 1 January, 2000. The day before yesterday was 30 December, 1999 and Mr. Shah was 83 on that day. Today i.e. 1 January, 2000 - he is 84. On 31 December 2000, he will be 85 and next year i.e. 31 December, 2001 - he will be 86. Hence, the date of birth is 31 December, 1915.

Many people do think of Leap year and date of birth as 29th February as 2000 is the Leap year and there is difference of 3 years in Mr. Shah's age. But that is not the answer.

Brain Teaser No : 00800

There are 4 mathematicians - Brahma, Sachin, Prashant and Nakul - having lunch in a hotel. Suddenly, Brahma thinks of 2 integer numbers greater than 1 and says, "The sum of the numbers is..." and he whispers

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 199
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

the sum to Sachin. Then he says, "The product of the numbers is..." and he whispers the product to Prashant. After that following conversation takes place :

Sachin : Prashant, I don't think that we know the numbers.
Prashant : Aha!, now I know the numbers.
Sachin : Oh, now I also know the numbers.
Nakul : Now, I also know the numbers.

What are the numbers? Explain your answer.

Submitted

Answer

The numbers are 4 and 13.

As Sachin is initially confident that they (i.e. he and Prashant) don't know the numbers, we can conclude that -

1) The sum must not be expressible as sum of two primes, otherwise Sachin could not have been sure in advance that Prashant did not know the numbers.

2) The product cannot be less than 12, otherwise there would only be one choice and Prashant would have figured that out also.

Such possible sum are - 11, 17, 23, 27, 29, 35, 37, 41, 47, 51, 53, 57, 59, 65, 67, 71, 77, 79, 83, 87, 89, 93, 95, 97, 101, 107, 113, 117, 119, 121, 123, 125, 127, 131, 135, 137, 143, 145, 147, 149, 155, 157, 161, 163, 167, 171, 173, 177, 179, 185, 187, 189, 191, 197,

Let's examine them one by one.

If the sum of two numbers is 11, Sachin will think that the numbers would be (2,9), (3,8), (4,7) or (5,6).

Sachin : "As 11 is not expressible as sum of two primes, Prashant can't know the numbers."

Here, the product would be 18(2*9), 24(3*8), 28(4*7) or 30(5*6). In all the cases except for product 30, Prashant would

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 200
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

know the numbers.

- if product of two numbers is 18:

Prashant : "Since the product is 18, the sum could be either 11(2,9) or 9(3,6). But if the sum was 9, Sachin would have deduced that I might know the numbers as (2,7) is the possible prime numbers pair. Hence, the numbers must be 2 and 9." (OR in otherwords, 9 is not in the Possible Sum List)

- if product of two numbers is 24:

Prashant : "Since the product is 24, the sum could be either 14(2,12), 11(3,8) or 10(4,6). But 14 and 10 are not in the Possible Sum List. Hence, the numbers must be 3 and 8."

- if product of two numbers is 28:

Prashant : "Since the product is 28, the sum could be either 16(2,14) or 11(4,7). But 16 is not in the Possible Sum List. Hence, the numbers must be 4 and 7."

- if product of two numbers is 30:

Prashant : "Since the product is 30, the sum could be either 17(2,15), 13(3,10) or 11(5,6). But 13 is not in the Possible Sum List. Hence, the numbers must be either (2,15) or (5,6)." Here, Prashant won't be sure of the numbers.

Hence, Prashant will be sure of the numbers if product is either 18, 24 or 28.

Sachin : "Since Prashant knows the numbers, they must be either (3,8), (4,7) or (5,6)." But he won't be sure. Hence, the sum is not 11.

Summerising data for sum 11:

Possible Sum	PRODUCT	Possible Sum
2+9	18	2+9=11 (possible) 3+6=9
3+8	24	2+12=14 3+8=11 (possible)

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 201
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

		4+6=10
4+7	28	2+12=14 3+8=11 (possible)) 4+6=10
5+6	30	2+15=17 (possible)) 3+10=13 5+6=11 (possible))

Following the same procedure
for 17:

Possible Sum	PRODUCT	Possible Sum
2+15	30	2+15=17 (possible)) 3+10= 13 5+6=11 (possible))
3+14	42	2+21=23 (possible)) 3+14=17 (possible)

		) 6+7=13
4+13	52	2+26=28 4+13=17 (possible))
5+12	60	2+30=32 3+20=23 (possible)) 4+15=19 5+12=17 (possible)) 6+10=16
6+11	66	2+33=35 (possible)) 3+22=25 6+11=17 (possible))
7+10	70	2+35=37 (possible)) 5+14=19 7+10=17 (possible))
8+9	72	2+36=38 3+24=27

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 202
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

		(possible) 4+18=22 6+12=18 8+9=17 (possible)
--	--	--

Here, Prashant will be sure of the numbers if the product is 52.

Sachin : "Since Prashant knows the numbers, they must be (4,13)."

For all other numbers in the Possible Sum List, Prashant might be sure of the numbers but Sachin won't.

Here is the step by step explanation:

Sachin : "As the sum is 17, two numbers can be either (2,15), (3,14), (4,13), (5,12), (6,11), (7,10) or (8,9). Also, as none of them is a prime numbers pair, Prashant won't be knowing numbers either."

Prashant : "Since Sachin is sure that both of us don't know the numbers, the sum must be one of the Possible Sum List. Further, as the product is 52, two numbers can be either

(2,26) or (4,13). But if they were (2,26), Sachin would not have been sure in advance that I don't know the numbers as 28 (2+26) is not in the Possible Sum List. Hence, two numbers are 4 and 13."

Sachin : "As Prashant now knows both the numbers, out of all possible products - 30(2,15), 42(3,14), 52(4,13), 60(5,12), 66(6,11), 70(7,10), 72(8,9) - there is one product for which list of all possible sum contains ONLY ONE sum from the Possible Sum List. And also, no such two lists exist. [see table above for 17] Hence, two numbers are 4 and 13."

Nakul figured out both the numbers just as we did by observing the conversation between Sachin and Prashant. It is interesting to note that there are no other such two numbers. We checked all the possible sums till 500 !!!

Substitute digits for the letters to make the following subtraction problem true.

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 203
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

S A N

T A

- C L A

U S

X M

A S

Note that the leftmost letter can't be zero in any word. Also, there must be a one-to-one mapping between digits and letters. e.g. if you substitute 3 for the letter M, no other letter can be 3 and all other M in the puzzle must be 3.

Answer

One of the simplest brain teaser as there are total 26 possible answers.

It is obvious that $S=C+1$. Since $A-S=S$, it is clear that $A=2*S$ or $2*s-10$. Also, L and X are interchangeable.

SANTA	-	CLAUS	=	XMAS
24034	-	16492	=	7542

24034	-	17492	=	6542
24074	-	15432	=	8642
24074	-	18432	=	5642
24534	-	16492	=	8042
24534	-	18492	=	6042
24794	-	16452	=	8342
24794	-	18452	=	6342
24804	-	15462	=	9342
24804	-	19462	=	5342
24974	-	16432	=	8542
24974	-	18432	=	6542
36806	-	27643	=	9163
36806	-	29643	=	7163
36156	-	27693	=	8463
36156	-	28693	=	7463
62132	-	54206	=	7926
62132	-	57206	=	4926
62172	-	53246	=	8926
62172	-	58246	=	3926
62402	-	53276	=	9126
62402	-	59276	=	3126

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 204
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section)
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com

62712	-	53286	=	9426
62712	-	59286	=	3426
62932	-	58206	=	4726
62932	-	54206	=	8726

You have downloaded this Paper from "software_jobs" Yahoo Group(Files section) 205
Please check out the files section of this group.It contains very
useful files needed for your preparation. Very Useful for freshers.
To directly subscribe through e-mail, just send a blank mail to :
software_jobs-subscribe@yahoogroups.com