I have two rectangular bars.

They have property such that when you light the fire from one end , it will take exactly 60 seconds to get completely burn.

However they do not burn at consistent speed (i.e it might be possible that 40 percent burn in 55 seconds and next 60 percent can burn in 10 seconds).

Problem is : How do you measure 45 seconds ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

Steps:

1) Light fire on first bar from both the ends and second bar from one end.

2) After 30 seconds(when first bar gets completely burned out), burn the second bar from second end as well.

3) When second run completely gets burned, you know its 45 seconds.

## **#2 - Logic Coins Puzzle**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

Assuming i have an infinite supply of coins.

What is the fewest number of coins would be required in order to make sure each and every coin touched exactly three other coins. View Answer Discuss

Answer & Explanation **Solution:** 

Four

three placed flat on the table in a triangle(touching each other) and put the fourth one on top of them in the middle.

## <u>#3 - Logic Picture Problem</u>

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

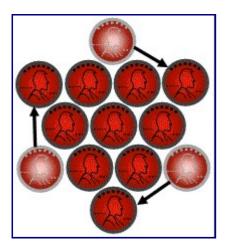
As you can notice in the picture that ten coins have been arranged to form a triangle pointing upwards. What you have to do is move three coins and make that triangle point downwards. Can you do it in just 3 moves?



View Answer Discuss

Answer & Explanation **Solution:** 

Move the coins as given in the figure and you will get the required result.



## **<u>#4 - Most Popular Monty Hall Brain Teaser</u>**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

The host of a game show, offers the guest a choice of three doors. Behind one is a expensive car, but behind the other two are goats.

After you have chosen one door, he reveals one of the other two doors behind which is a goat (he wouldn't reveal a car).

Now he gives you the chance to switch to the other unrevealed door or stay at your initial choice. You will then get what is behind that door.

You cannot hear the goats from behind the doors, or in any way know which door has the prize.

Should you stay, or switch, or doesn't it matter ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

You better switch!

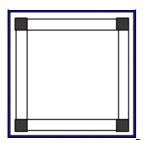
Your first choice has a 1/3 chance of having the car, and that does not change.<br>The other two doors HAD a combined chance of 2/3, but now a Goat has ben revealed behind one, all the 2/3 chance is with the other door.

# **#5 - Simple Matchstick Riddle**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc$ 

You can see that four match sticks have been joined in the given figure to form one square.

Can you form five squares using six matchsticks ?

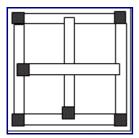


View Answer Discuss

Answer & Explanation

### Solution:

See the figure for the answer. Wasn't it a bit tricky?



## **#6 - Maths Magic Riddle**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

I can prove why 1 = 2

Step1. Lets say y = xStep2. Multiply through by x xy = x2Step3. Subtract y2 from each side xy - y2 = x2 - y2Step4. Factor each side y(x-y) = (x+y)(x-y)Step5. Divide both sides by (x-y) y = x+yStep6. Divide both sides by y y/y = x/y + y/yStep7. And so... 1 = x/y + 1Step8. Since x=y, x/y = 1 1 = 1 + 1Step9. And so... 1 = 2

How is this possible ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

Step 5 is invalid, because we are dividing by (x-y), and since x=y, we are thus dividing by 0. This is an invalid mathematical operation (division by 0), and so by not following basic mathematical rules

# **#7 - Crossing The River In Minimum Time Puzzle**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

Four people need to cross a dark river at night.

\* They have only one torch and the river is too risky to cross without the torch.

\* If all people cross simultaneously then torch light wont be sufficient.

\* Speed of each person of crossing the river is different.cross time for each person is 1 min, 2 minutes, 7 minutes and 10 minutes.

What is the shortest time needed for all four of them to cross the river ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

#### 17 min

The initial solution most people will think of is to use the fastest person as an usher to guide everyone across. How long would that take? 10 + 1 + 7 + 1 + 2 = 21 minutes. Is that it? No. That would make this question too simple even as a warm up question.

#### Solution:

17 min

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Let's brainstorm a little further. To reduce the amount of time, we should find a way for 10 and 7 to go together. If they cross together, then we need one of them to come back to get the others. That would not be ideal. How do we get around that? Maybe we can have 1 waiting on the other side to bring the torch back. Ahaa, we are getting closer. The fastest way to get 1 across and be back is to use 2 to usher 1 across. So let's put all this together.

1 and 2 go cross 2 comes back 7 and 10 go across 1 comes back 1 and 2 go across (done)

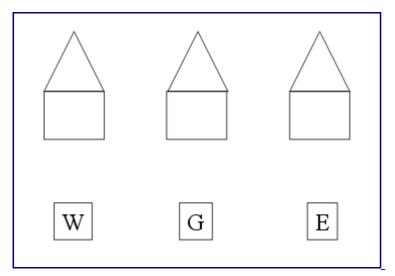
Total time = 2 + 2 + 10 + 1 + 2 = 17 minutes

### **<u>#8 - Picture Brain Teaser</u>**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow Popularity <math>\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

You can see the figure or draw one of your own. The scenario is as shown. There are three houses represented with the triangle over the square. There are three utilities: W, G and E representing water, gas and electricity respectively.

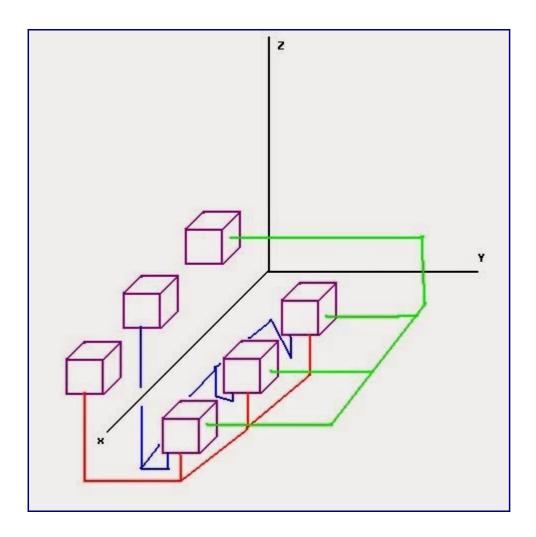
Can you draw a line and get each utility into every house (9) total lines without ever crossing any line?



### View Answer Discuss

Answer & Explanation **Solution:** 

This puzzle has no answer if you are considering this figure in a 2d domain. However if you follow it on a three-dimensional plane, you can do it like shown in the figure given.



# **<u>#9 - Most Popular Logical Puzzle</u>**

Difficulty  $\Leftrightarrow \Leftrightarrow \Leftrightarrow \Leftrightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

Outside a room there are three light switches. One of switch is connected to a light bulb inside the room.

Each of the three switches can be either 'ON' or 'OFF'.

You are allowed to set each switch the way you want it and then enter the room(note: you can enter the room only once)

Your task is to then determine which switch controls the bulb ?? <u>View Answer Discuss</u>

Answer & Explanation

### Solution:

Set the first switches on for abt 10min, and then switch on the second switch and then enter the room.

Three cases are possible

1.Bulb is on => second switch is the ans

2.Bulb is off and on touching bulb, you will find bulb to be warm

=>1st switch is the ans.

3.Bulb is off and on touching second bulb , you will find bulb to be normal(not warm) =>3rd bulb is the ans.

# <u>Mind Teasers : Tricky Probabilty Problem To</u> <u>Solve</u>

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc$ 

Aishwarya was first to board to her flight to delhi.

She forgot her seat number and picks a random seat for herself.

After this, every single person who get to the flight sits on his seat if its available else chooses any available seat at random.

Abhishek is last to enter the flight and at that moment 99/100 seats were occupied.

Whats the probability what Abhishek gets to sit in his own seat ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

1/2

one of two is the possibility

1. If any of the first 99 people sit in Abhishek seat, Abhishek will not get to sit in his own seat.

2. If any of the first 99 people sit in Aishwarya's seat, Abhishek will get to sit in his seat.

# Mind Teasers : Trick Gift Brain Teaser

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$ Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc$ 

Cindy opened twenty five presents. Duke opened five presents. John opened fifteen presents.

Judging by the statements, can you decipher how many presents will be opened by Rhea? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

Rhea will open just one present. Cindy|Y - Y is the 25th alphabet Duk|E - E is the 5th alphabet Joh|N - N is the fifteenth alphabet Rhe|A - A is the first alphabet

## **Mind Teasers : Very Hard Math Question**

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc$ 

There stand nine temples in a row in a holy place. All the nine temples have 100 steps climb. A fellow devotee comes to visit the temples. He drops a Re. 1 coin while climbing each of the 100 steps up. Then he offers half of the money he has in his pocket to the god. After that, he again drops Re. 1 coin while climbing down each of the 100 steps of the temple.

If he repeats the same process at each temple, he is left with no money after climbing down the ninth temple. Can you find out the total money he had with him initially? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

146900

### Explanation:

Whenever you face such type of questions, it is wise to begin from the last thing. Here in this question the last thing will be the 9th temple. He climbed down 100 steps and thus you know, he had Rs. 100 before beginning climbing down. Thus, he must have offered Rs. 100 to the god in that temple too (he offered half of the total amount). Also, he must have dropped Rs. 100 while climbing the steps of the ninth temple. This means that he had Rs. 300 before he begand climbing the steps of the ninth temple.

Now, we will calculate in the similar manner for each of the temples backwards. Before the devotee climbed the eight temple: (300+100)\*2 + 100 = 900Before the devotee climbed the seventh temple: (900+100)\*2 + 100 = 2100Before the devotee climbed the Sixth temple: (2100+100)\*2 + 100 = 4300Before the devotee climbed the fifth temple: (4300+100)\*2 + 100 = 8900Before the devotee climbed the fourth temple: (8900+100)\*2 + 100 = 18100Before the devotee climbed the third temple: (18100+100)\*2 + 100 = 36,500Before the devotee climbed the second temple: (36500+100)\*2 + 100 = 73300Before the devotee climbed the first temple: (73300+100)\*2 + 100 = 146900 Therefore, the devotee had Rs. 146900 with him initially.

## Mind Teasers : Brain Twister For Kids

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

A clever robber breaks into a closed bank where he finds a clerk. He asks password of the safe from the clerk while pointing a gun on his forehead. Out of fear, the clerk manages to blurt out, "Every day, the password of the safe is changed. I can help you but please point away the gun as if you kill me, you will never be able to crack the password.

The robber ties the clerk on a chair and insert a cloth in his mouth. He then easily opens the safe after inserting the code and takes all the money before he flees.

How did he know the password ? <u>View Answer</u> <u>Discuss</u>

Answer & Explanation **Solution:** 

The clerk said that every day the password is CHANGED. Changed is the password.

## Mind Teasers : Crossing The River In Minimum Time Puzzle

Difficulty  $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$  Popularity  $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$ 

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What is the shortest time needed for all four of them to cross the river ? <u>View Answer Discuss</u>

Answer & Explanation **Solution:** 

17 min

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Total time = 2 + 2 + 10 + 1 + 2 = 17 minutes