

# Sums. They're Math Magic

## 21 - Sum More Logic

**Please go through each slide stopping until you have understood the concept described**

# Sums. They're Math Magic

## 21 - Sum More Logic

**Have you got the bottle?**



**There are 3 bottles which are full and three which are empty.**

**What is the minimum number of bottles that you have to move to make them alternate between empty and full?**

# Sums. They're Math Magic

## 21 - Sum More Logic

Have you got the bottle?



You only need to move one bottle.

Pick up the second full bottle and pour the contents into the fifth bottle and put the second bottle back!

# Sums. The're Math Magic

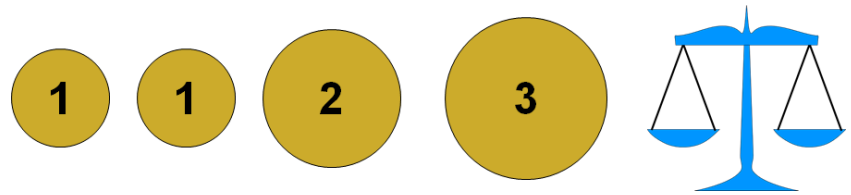
## 21 - Sum More Logic

**Weight for it!**

You have two \$1 coins, one \$2 coin which should be exactly double the \$1 coin's weight, and one \$3 coin which should be three times the weight of the \$1.

One is under or over weight.

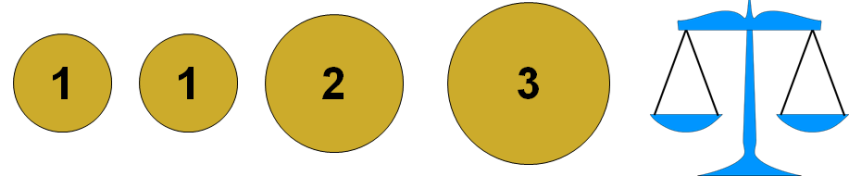
**How do you find which it is?**



# Sums. The're Math Magic

## 21 - Sum More Logic

### Weight for it!



1. Weigh the two \$1 coins.
2. If unequal, the \$2 and \$3 are good. Weigh one \$1 with the \$2 against the \$3.
3. If equal the other \$1 is wrong and if it rose in weighing 1 it is underweight, if fell it is overweight.
4. If equal weigh two \$1 against the \$2. If \$2 is wrong it will rise if underweight or fall if over weight

# Sums. They're Math Magic

## 21 - Sum More Logic

### Match Sticks



How can you make the equation true by moving the minimum number of match sticks?

# Sums. They're Math Magic

## 21 - Sum More Logic

### Match Sticks

Just move one match stick



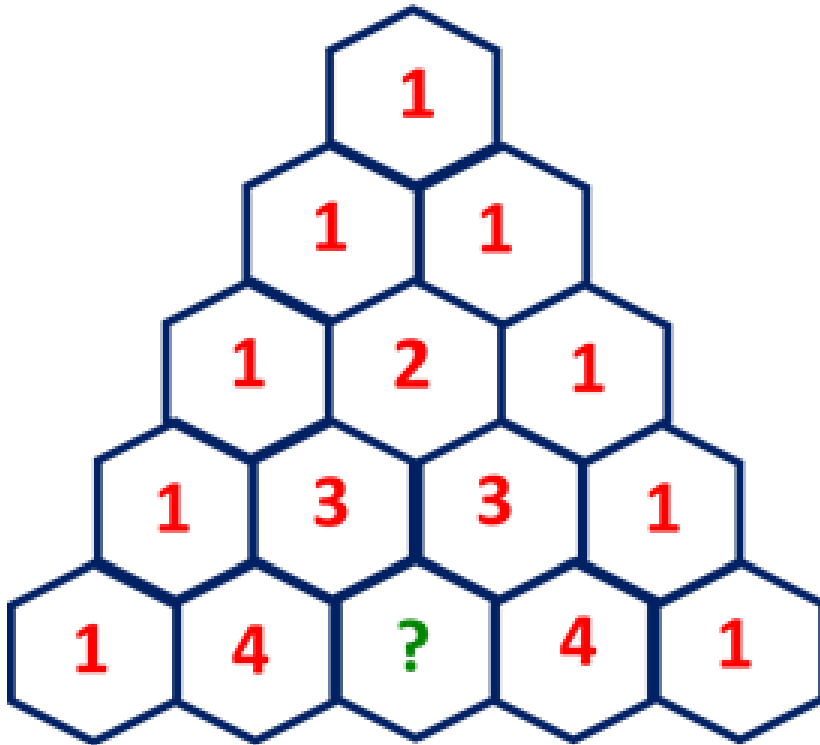
Why didn't the quarter roll down the hill with the nickel?

**Because it had more cents!**

# Sums. They're Math Magic

## 21 - Sum More Logic

What Is The Missing Number?

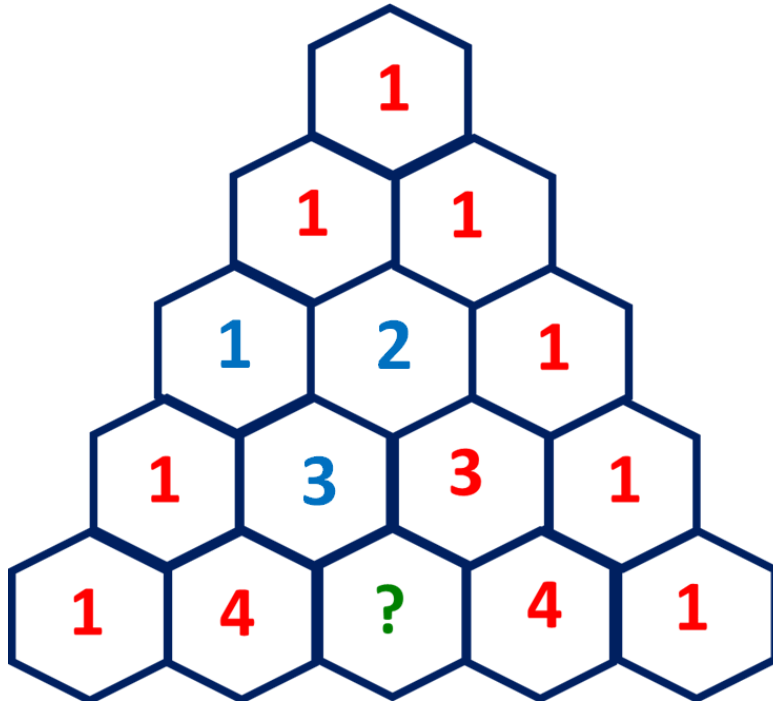




# Sums. They're Math Magic

## 21 - Sum More Logic

What Is The Missing Number?



The missing number is 6

Each has the sum of the adjacent higher level numbers.

E.g.  $1 + 2 = 3$

# Sums. The're Math Magic

## 21 - Sum More Logic

**Please go to the next lesson.**

**Sum More Logic 2**