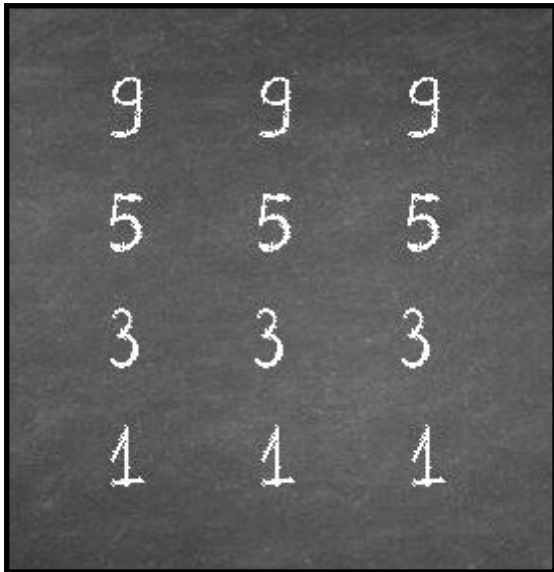


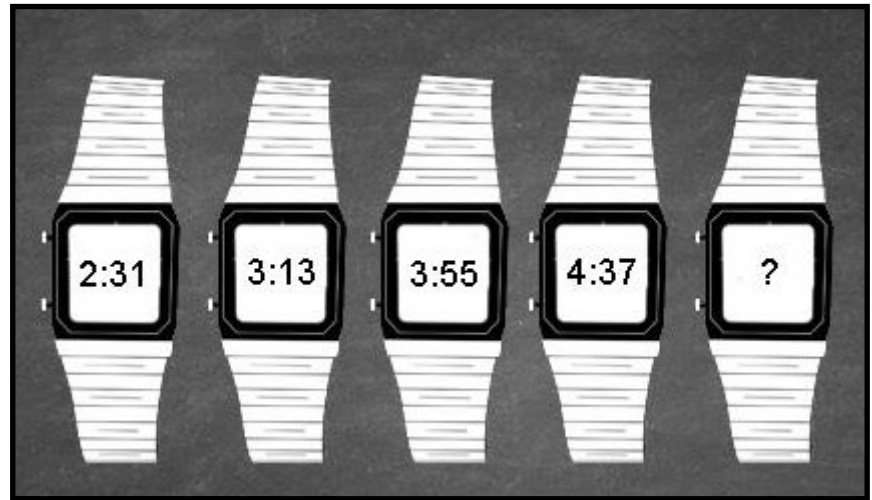
Behold, a "magic square". It puts Gandalf to shame with the astounding way each column, row and diagonal adds up to 111. And now that you know that, fill in the blanks to make it so.

$$\frac{24}{3} = \frac{24}{9}$$

Didn't you just hate fractions at school? So much so, this very picture is probably giving you 'Nam-style flashbacks. But overcome your trauma and tell us how you can move just one number to make this equation correct.



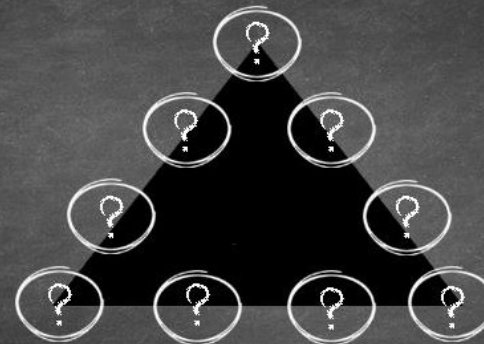
What in god's name is going on here? We'll tell you: it's a bunch of numbers. Moreover, you've got to circle six of them so they add up to 21. Don't use a marker pen on the screen, it'll make a mess.



If...  $1 = 5$   
 $2 = 10$   
 $3 = 30$   
then  $4 = ?$

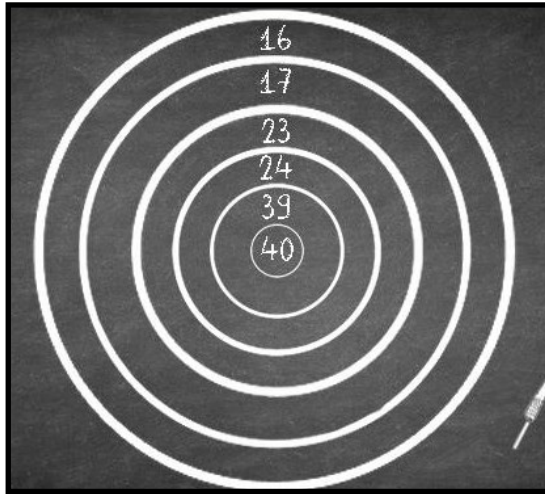
3  
5  
8  
13  
22  
?

$$101 - 102 = 1$$

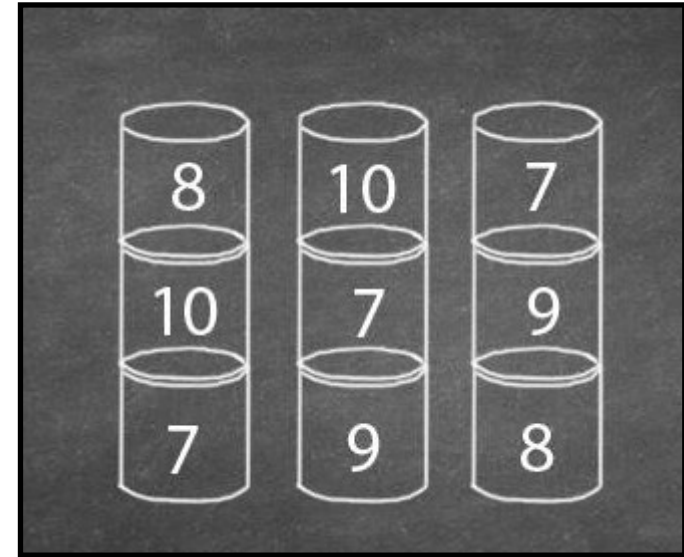


Now, eagle-eyed mathematical prodigies out there will realise almost immediately that  $101 - 102$  does NOT equal 1. But can you make it right by moving one number around? Well, you can. But can YOU?

Ah yes, the deadly number pyramid of death. That's what it's technically called, in maths circles. Speaking of which, using the numbers 1-9 (and using each number only once) make each side of the triangle add up to 17.



Darts: it isn't all just pub-faced men throwing things at a board. Sometimes it's you, staring at an electronic screen, working numbers out. Specifically, working out how to score exactly 100, using an unlimited supply of darts.



In case you're wondering, this is an extremely poor rendering of cans piled up at a fairground. You get three throws, and can only knock off the top of each column. If the second throw counts as double the number, and the third counts as triple, which cans should you target to get 50?

31	73	7
13	37	61
67	1	43

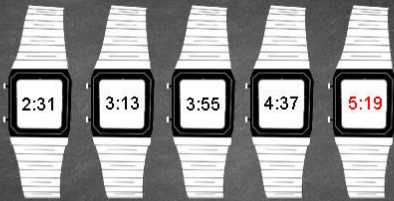
$$\frac{21}{3} = \frac{21}{9}$$


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SOLUTION:

$$2 \frac{1}{3} = \frac{21}{9}$$

$$\begin{array}{ccc} 9 & 9 & 9 \\ 5 & 5 & 5 \\ \hline 3 & 3 & 3 \\ \hline 1 & 1 & 1 \end{array}$$



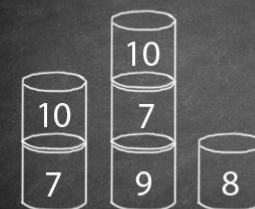
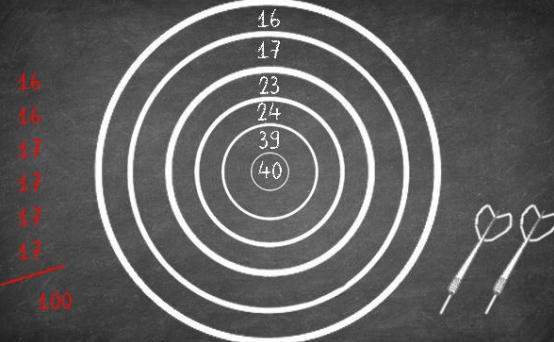
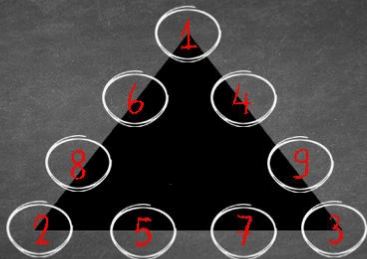
- 3
- 5
- 8
- 13
- 22
- 39

$$101 - 102 = 1$$


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SOLUTION:

$$101 - 10^2 = 1$$



SOLUTION:

1st throw: 7 = 7

2nd throw: 8 = 16

3rd throw: 9 = 27