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Regulars

## Puzzle No. 6 – world cup medallions



If you're one of those people who dropped a grade in your Maths GCSE because you were too busy watching the World Cup then here's your chance to make amends...

This issue's puzzle is quite hard, so we've provided a hint. Thanks to *Don Kite* and the pupils at The Netherhall School, Cambridge, for bringing it to our attention.

### The problem

During the World Cup, PASS Maths' local supermarket was running a World Cup medallions promotion. Each time you spent a certain amount of money you got a free coin embossed with the face of one of the members of the England squad.

There were 22 players in the squad, so there were 22 medallions to collect. If we assume that each time you get a medallion it is equally likely to represent any one of the 22 players the question is: *on average* how many will you need to collect before you get a full set?

This problem is quite hard to do all in one go, so if you need help, look at [the hint](#)

We will publish the best explanation in the next issue, along with the answer to the problem itself. Please submit your answer, with explanation, to [Any comments?](#)



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