

DARA O'BRIAIN:  
SCHOOL OF  
HARD SUMS  
Set 1 #01



There's a very long piece of string tied all the way around the Earth's equator. If you cut it and added in an extra 10 feet of string would anyone notice?

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Set 1 #02

On your way to school you have to pass 3 bullies in turn. Each one always takes half of your lunch money, but then gives you £1 back because they feel sorry for you. How much lunch money should you take to school to make sure you have exactly £2 when you get there to buy your favourite salad?

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Set 1 #03



You're at a party because you're just so damn popular. Everyone shakes hands with everyone else because it's quite a formal do. There were 66 handshakes. How many people are at the party including yourself?

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Set 1 #04

Four balls with different teams written on them are placed in a hat. One is Arsenal, one Chelsea, one Man Utd and one is Man City. The hat is shaken and two teams are drawn. It is announced that one of the teams is from Manchester. What is the probability that the other team is also from Manchester?





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Set 1 #05

You've made a giant jelly which weighs 100kg and is 99% water by weight. You leave the jelly out overnight and the water evaporates from the jelly until it reaches 98% water by weight. How much does the jelly now weigh?

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Set 1 #06

When is the next year that there WON'T be a Friday the 13th?

13  
FRIDAY

4 people stand at one end of a bridge and they need to cross it. The bridge can only support 2 people at a time. It's night so they need to use a flashlight. Unfortunately, they only have 1 flashlight with 17 minutes of battery left. They can cross in 1, 2, 5 and 10 minutes but a group only moves as fast as its slowest member. Show how they can all make it across.

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Set 1 #07

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Set 1 #08

If a group of office workers are stood in an evenly spaced circle and the 5th person is stood directly opposite the 17th person, how many people are in the group?





## DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #01

You need to get a lizard, an ant and a sugar cube across a puddle using a beermat as a raft. Amazingly, you're small enough to fit on too and will do the rowing. You can fit one other with you at any time. If left unattended, the lizard will eat the ant and the ant will eat the sugar cube. How can you all arrive uneaten on the other side of the puddle?



## DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #02

You've got 21 pork scratchings on a beermat and you and your mate take it in turns to eat either 1, 2 or 3. Whoever eats the last pork scratching has to eat the beermat. Should you go first or second?

Go first?

Go second?



## DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #03

You catch 5 tube mice, and decide to weigh them (weirdo).

As you weigh them consecutively, the average weight increases by 1g. If the first mouse is 16g, how heavy is the last?

20g?

24g?

28g?

32g?

36g?



## DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #04

If 70% of people on a train had beans this morning, 75% had eggs, 80% had sausages and 85% had toast, how many definitely had a full English breakfast?

10%?

15%?

20%?

0%?





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Set 2 #05

You and your mate are sharing a carton of 100 fries. You take it in turns to eat between 1 and 10 fries. Whoever eats the last fry has to perform a humiliating dance. To avoid that, should you offer to go first or second?

Go first?

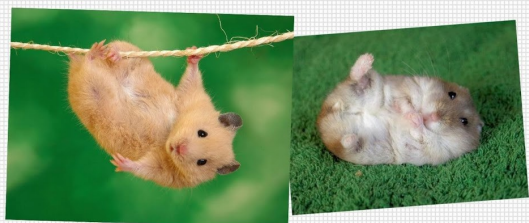
Go second?



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Set 2 #06

If you walk to work at 4mph and moonwalk home at 6mph, what is your average speed?

4mph? 4.8mph? 5mph? 5.6mph? 6mph?



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Set 2 #07

Your love of hamsters has gotten way out of hand and you now have 224. If their population doubles every 10 months when did you have fewer than 10 hamsters?

1 year, 8 months ago? 2 years, 6 months ago?  
4 years, 2 months ago? 5 years, 10 months ago?  
6 years, 8 months ago?



**DARA O'BRIAIN:  
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Set 2 #08

There are 5 people with mohawks. You decide to measure the mohawks. (Weird, but ok...) As you measure them consecutively, the average height increases by 1 inch. If the first person's mohawk height is 16 inches, how high is the last?

20 inches? 24 inches? 28 inches? 32 inches? 36 inches?



# DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #09

If it takes you 19 minutes to complete a Sudoku puzzle and 26 minutes to do a crossword whilst on a tube travelling at 30mph to work, which is 5 miles away, by what distance have you missed your stop?

12.5 miles? 15.5 miles? 17.5 miles? 19.5 miles? 21.5 miles?

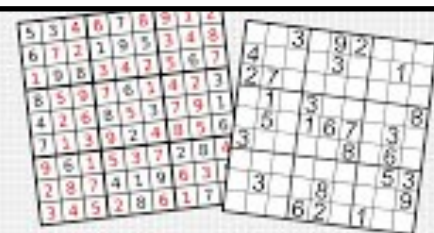


# DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #10

If every time the hands of a clock overlapped you had to remove an article of clothing, how long would it take for you to be naked? Let's say you're wearing 2 socks, 2 shoes, trousers and a T-shirt and it's dead on noon, so you remove the first item immediately.

4h55m? 5h27m? 6h33m? 7h38m? 8h44m?



# DARA O'BRIAIN: SCHOOL OF HARD SUMS

Set 2 #11

If 76.8% of people who attempted a Sudoku puzzle failed to complete it, at least how many people must have attempted it?

75? 95? 105? 115? 125?