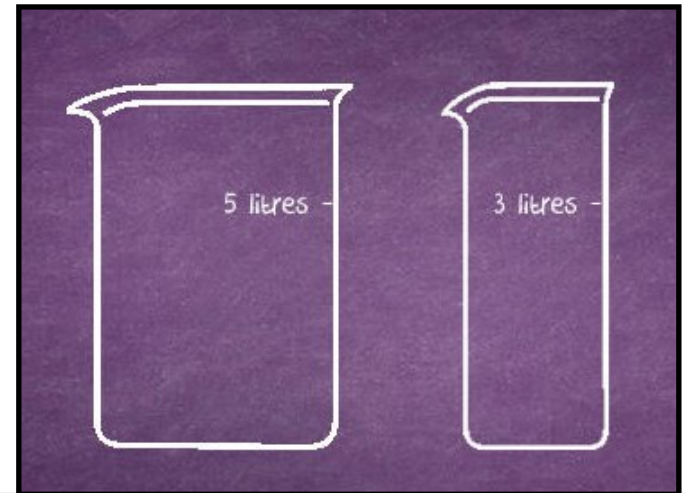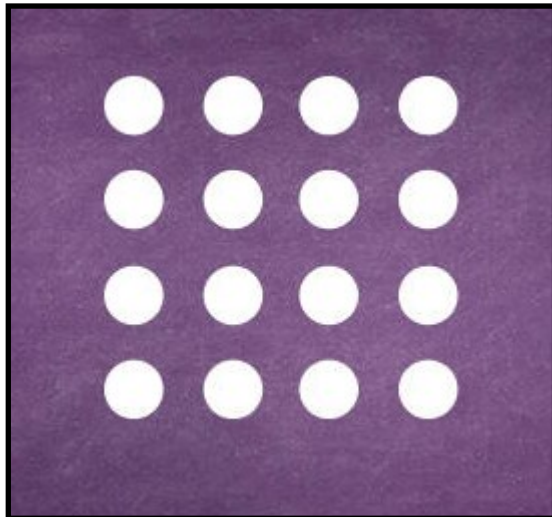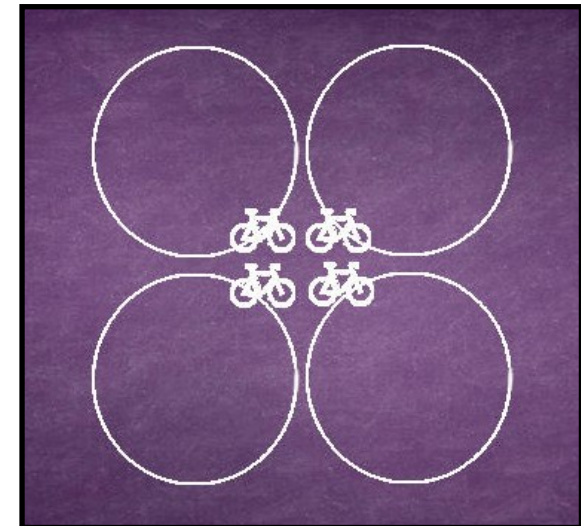You're organising your weekly "whisky and ale" party but the crates of supplies have been mislabelled. Actually, though, you only need to open one of them to work out what's in the other two. Which, and why?

Remember those beakers you had in double Chemistry? Now imagine they're massive, for no good reason. Now also imagine you have to measure 4 litres of sulphuric acid, using only a 3 litre beaker and a 5 litre beaker, also for no good reason. How is it done, in the FEWEST number of steps?
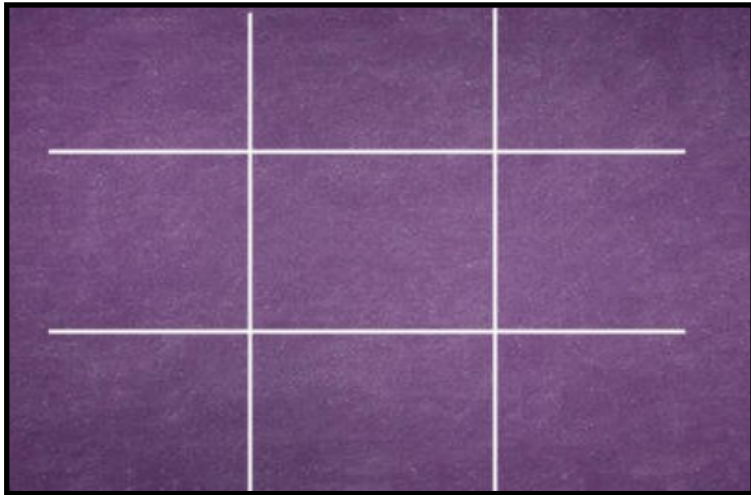

You know what's better than circles? Circles with lines drawn through them. They're brilliant. Whilst we're on the subject, can you connect ALL of the circles above using six straight lines? BUT... you have to do it in such a way that, if you were attempting it with a pen and paper, your pen wouldn't break contact with the paper at any point.
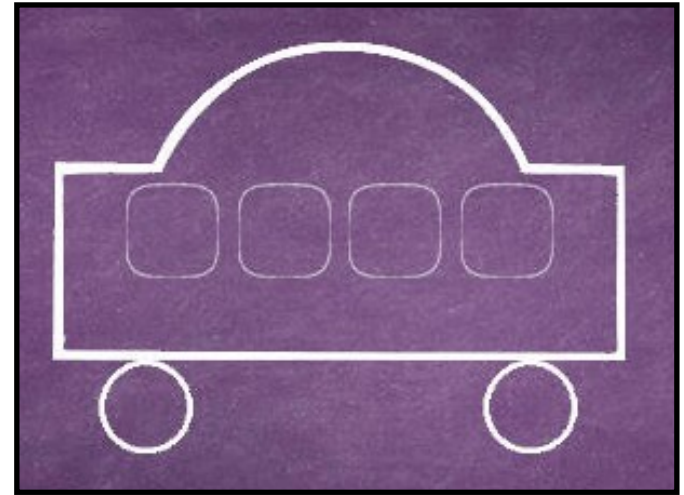

Imagine a big park. Now imagine four cyclists being all irritatingly healthy and wholesome, cycling round and round in four separate circular paths. Each path is a third of a mile in circumference.
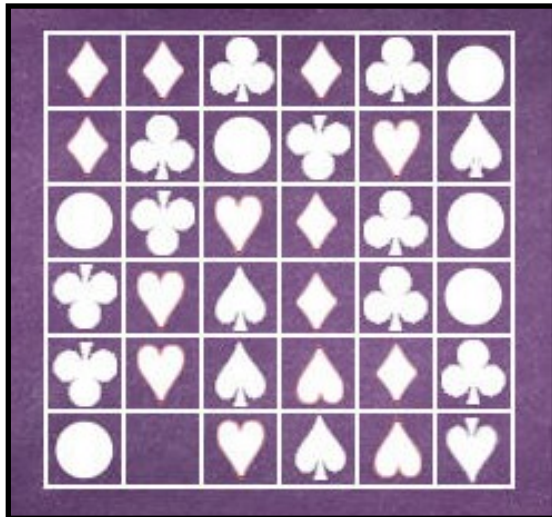
If they start at the same time, at the positions shown above, and if they're going at 6, 9, 12, and 15 mph respectively, how many times will they simultaneously return to the starting spots during a 20 minute workout?
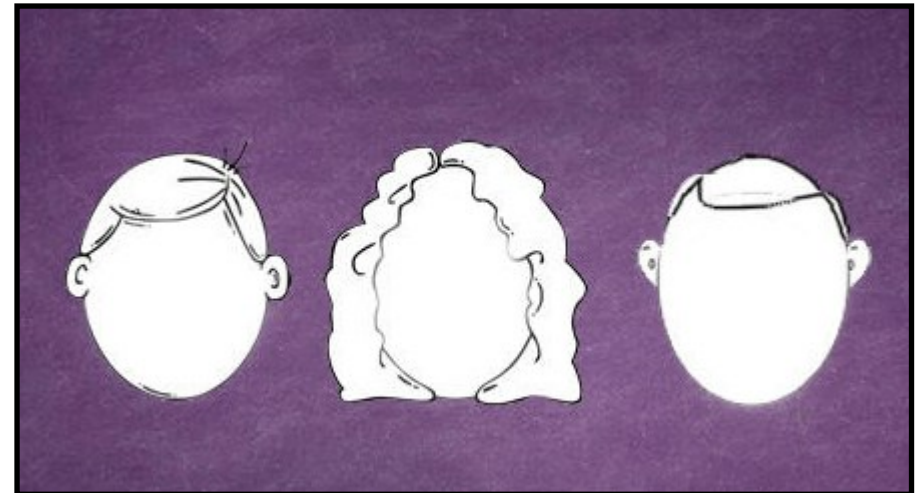
As games go, noughts and crosses is pointless and unsatisfying – the game equivalent of Ryvita. It's much better as a puzzle instead. Namely, can you place six Xs without making a three-in-a-row in any direction?

This is a bus. No, we're not sure why it has a bulging dome-like roof either. It's just a bus. Question is, which direction is it going – right or left?
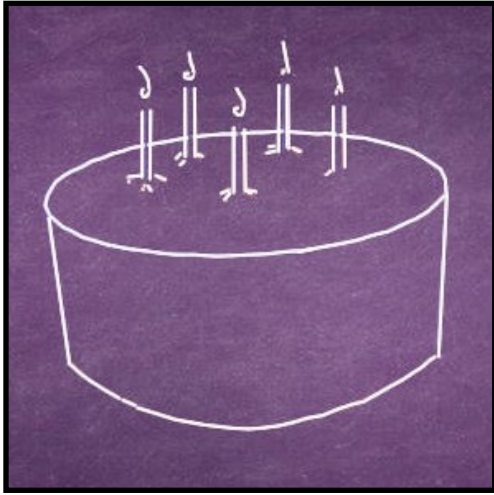

Here, have a look at this madness-inducing grid. You'll notice there's an empty box. Summon the powers of the logic gods and work out what should go in it.
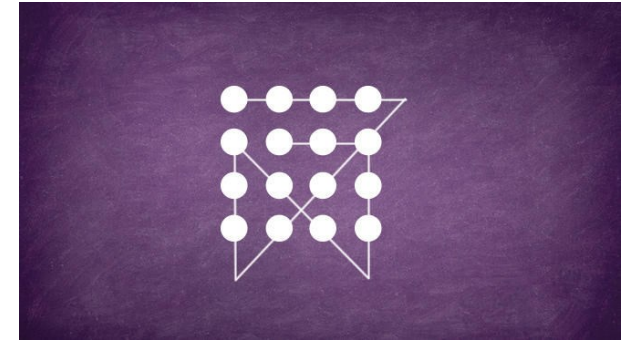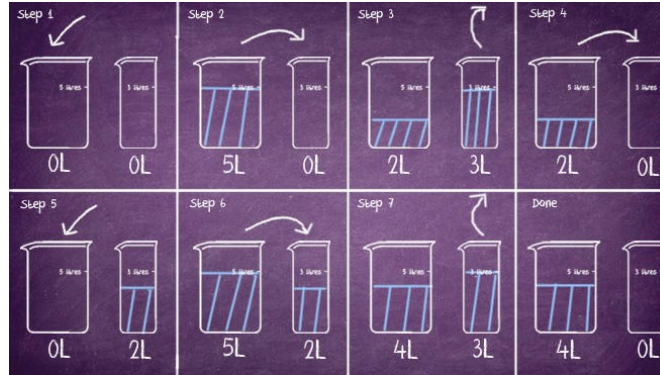

Dr White, Dr Black and Dr Brown are lunching together in the hospital canteen when the one woman in the group observes that their names are white, black and brown and that they have white, black and brown hair. The person with black hair then replied, saying that – even MORE interestingly – nobody's hair colour matched their name. "Good lord, you're right!" Dr White piped up in agreement.

Given all this info, and the fact that the woman in the group doesn't have brown hair, who's who?
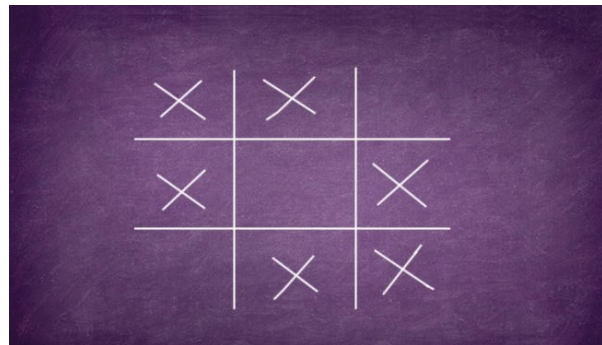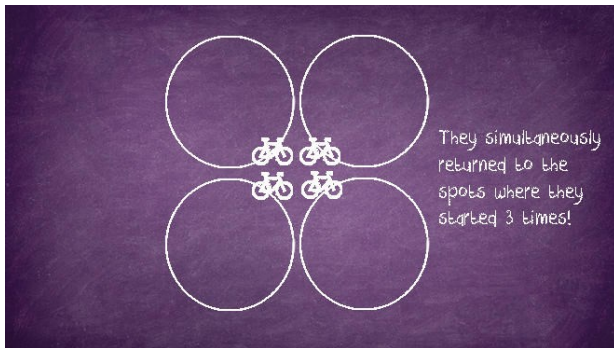
It's your birthday. But because you were unwise enough to invite friends, you have to share your cake out. How can you divide the lovely thing into 8 equally-sized slabs using only 3 straight cuts?

Solutions.

They simultaneously returned to the spots where they started 3 times!

It's going right, because otherwise you'd be able to see the door.