The Curious Incident of the Dog in the Night-Time
Simon Stephens, adapted from the novel by Mark Haddon

Christopher is very good at Maths. Prior to this speech, fifteen-year-old Christopher discovers a dead dog, investigates the death of the dog, discovers that his mother is not dead (as his father tells him), moves to live with her in London, and uncovers that his father killed the dog. Despite this, he passes his maths exam with an A.*

CHRISTOPHER: Thank you very much for clapping and thank you very much for staying behind to listen to how I answered the question on my maths A level. Siobhan said it wouldn't be very interesting but I said it was.

She didn't tell me what I should use, so I decided to use all the machines and computers in the theatre including: VLO00 arc lights, which are moving lights, light emitting diodes, JBL Control speakers, a Countryman boom mic and radio transmitter, 4 PTDX Panasonic overhead projectors and our DSM called Cynthia who will operate these.

I had ninety minutes to answer ten questions- but I spent thirty minutes doing groaning which meant I only had six minutes to answer this question.
Show that, a triangle with sides that can be written in the form n squared plus one, n squared minus one and two n (where n is greater than one) is right angled.
And this is what I wrote.

(He runs and starts a timer)

Start the clock.

If a triangle is right angled, one of its angles will be ninety degrees and will therefore follow Pythagoras' theorem.

Pythagoras said that a squared plus b squared equals c squared.

To put it simply, if you draw squares outside the three sides of a right-angled triangle then add up the area of the two smaller squares, this will be equal to the area of the larger square. This is only true if the triangle is right angled.

Come on Bluey!

The A level question is an algebraic formula for making right-angled triangles
Algebra is like a computer program that works for whatever numbers you put into it.

To find the area of a square you must multiply the length by the width.

So... the area of this square is 2n x 2n.

Which equals 4n squared.

The area of this square is (n squared-1)x (n squared-1).

Which equals n to the power of four -2n squared plus 1.

Then, if we add these two squares together…

This equals n to the power of 4 plus 2n squared plus 1

NOW. We need to find the area of square on the hypotenuse which is (n to the power of 2+1) x (n to the power of 2 + 1)

Which equals n to the power of 4 plus 2n squared plus 1

Which is THE SAME TERM!

So the area of the two small squares adds up to the area of the larger square So all my squares fit together to satisfy Pythagoras' theorem So the triangle is - RIGHT ANGLED!

Quod Erat Dermonstrandum

And that is how I go an A*

Confetti

‘Maths Appendix’