

# The Adult Challenge 1

Six professors in the Mathematics Department visited the coffee room on the day that the coffee fund was stolen. Each entered the room only once, stayed for some time, and then left. Whenever any two of them were in the room at the same time, at least one of them noticed the other was there. (Professors of mathematics do not always notice one another.) When the Department secretary quizzed the six professors about their visits to the coffee room the following information was given:

Professor	Claimed to have seen
Abel	Bernoulli and Erdos
Bernoulli	Abel and Fermat
Cauchy	Descartes and Fermat
Descartes	Abel and Fermat
Erdos	Bernoulli and Cauchy
Fermat	Cauchy and Erdos

If exactly one of the professors was lying to frame someone else (where here "lying" means giving false information, not omitting information), who is the culprit?

*Please remember, an answer to a mathematical problem is not worth much without a clear argument to support it.*

If logic is not your cup of tea – try this.

## Challenge 2 – with thanks to Maths team for giving me the idea.

If A is worth £1 and B is worth £2 and C is £3.....

Find me the name of the most expensive mathematician – bonus marks to anyone finding a woman mathematician.  
Or the least expensive!!!

Don't forget you can try the internet challenge on [www.fonant.co.uk/mftm](http://www.fonant.co.uk/mftm)