

## Loci and constructions

MRS GREEN Look, you planted it too close and now that it's grown. I can't open my window! I'm off to bingo. When I come back I'd like that tree at least 8 metres from the back wall of the bungalow.

JON Yes, Mrs Green...

MRS GREEN But, I want it equidistant from the back fence and the side fence that separates our two gardens.

JON Yes, Mrs Green...

MRS GREEN And, I've decided that I want a flower bed 1.5 meters wide around the base of the tree.

JON ...Whatever you say, Mrs Green.

AL GEBRA I'd planted a whole lotta stuff in my time, mostly evidence, but something told me Johnny boy here was about to go barking up the wrong tree.

JON Erm... who are you?

AL GEBRA The name's Al. Private Detective.

A maths crime was about to go down, I had to put a stop to this loci lawlessness and fast.

Let's roll!

The garden was 12 meters wide and 14 metres long. I drew a parallel to the back wall 8 metres away. I needed to work out where equidistance from the side fence and back fence was going to be, and bisect the angle using compasses to draw arcs.

I put it in the corner and made a couple of arcs on the two fences.

JON Uh?

AL GEBRA Then I stuck it on one of the arcs I made. Bang! Right on the kisser and swung it around to draw a big old arc across the garden. After I'd made an intersection with the big arc, all that was left for me to do was get things

# Bitesize

straight. A quick line from the corner of the fence to the intersection of my arcs and – bingo!

AL GEBRA

Now start diggin'...

I had to make this quick, before nosy old Mrs Green got back and started looking into it.

1.5 meters huh?

Despite the current aroma, something told me the kid was gonna come up smellin' of roses.

MRS GREEN

Hmmm not bad... who's the handsome stranger?

AL GEBRA

Case closed.