## Where's the WiFi?

Arthur, Betty and Charlotte are all at school, in different rooms, successfully using their friend Darren's WiFi hotspot from his phone.

Arthur and Betty can connect within 50m of Darren's phone, but Charlotte's phone can manage 80m.

The map of the school, below, shows where Arthur, Betty and Charlotte are at the moment.



Darren is due East of Arthur who is in room 3.

Betty is in room 13 and Charlotte, in room 11 is Northeast of Darren.

Where is Darren?

- 1. Mark, on the map, the positions of Arthur, Betty and Charlotte.
- 2. Use the range of their phones and the scale of the map to mark out a region where Darren may be.
- 3. Use the clues of where Darren is relative to Arthur and Charlotte to construct lines along which Darren might be.
- 4. Where do you think Darren is?