

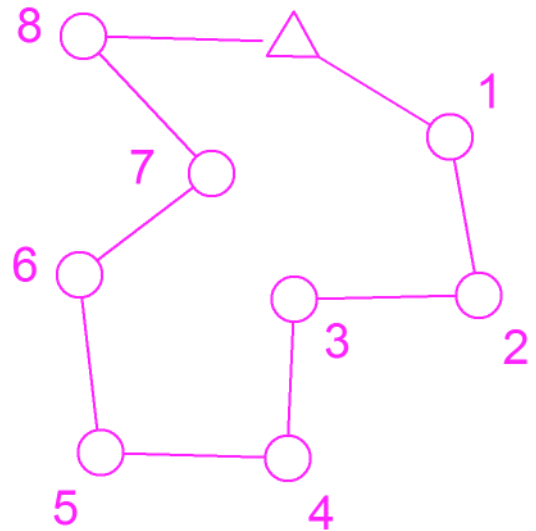
## Distance estimation

Aim: to provide orienteers with feedback about the accuracy of their distance estimation.

Resources: cones/stakes/kites/pencils; paced/measured 100m; prepared 'maps' & course set out.

### Method:

1. Participants find out methods of distance estimation and have a chance to try each in a variety of terrain and find their preference:
  - ⇒ Pacing
  - ⇒ By eye
2. Discuss reliability of distance estimation (what is an acceptable 'error'?)
3. Discuss when to use:
  - ⇒ A rough estimation for a long way along handrails (e.g. half way, about 100m: 20% error?)
  - ⇒ As accurate as possible distance judgement for a short distance through terrain (e.g. 20m from the junction: 10% - 15% error?)
4. Test: how good is their distance estimation?  
Set out a course and participants estimate the distance between controls. (Participants can choose their preferred method of estimation).  
Participants return to the start, are given the answers and a chance to discuss the results. There is the opportunity to try the course again knowing the answers and having received coach feedback/advice.



### Notes about the map/course:

- The map is deliberately not to scale – the 'distances' between controls on the map is uniform but this is not the reality. (This is basically done for the sake of armchair planning for an area without an O map).
  - At each control, there will be an arrow pointing the participant in the direction of the next control.
  - Controls will be easily visible from the previous control.
  - Distances between controls will vary from 20m to 100m.
  - A variety of terrain will be covered.
5. Where to next? Make distance estimation a habit. Group discussion for 'helpful hints' (as some are unable to multitask/ways of counting/measuring from different map scales/etc.)

### Suggestions for Development: accurate distance estimation (10% – 15%).

Lay out a star course with an accurate but blank map. For each control, there will be three alternative control markers at different distances encompassing the 10% - 15% rule. Participants measure on the map the distance they have to go; they then do that distance on the ground, punching at the control they think is correct. Return to central starting point and have answer checked.  
Make sure that this is also carried out at race pace as appropriate to the participant. The star should also encompass different terrain types.  
Emphasise that they need to revisit their method of distance judgement to ensure acceptable accuracy.

**Please write your ideas for development on a sheet of paper & hand to Lynne for inclusion in the conference notes.**