Using a GPS with grid references

Most GPS units default to displaying coordinates in **Latitude/Longitude** with a **WGS84** datum, but this is not particularly useful when trying to use GPS positions with *topographic* maps. Therefore, the first thing you'll probably want to do when you get a GPS is to set it to use a projection of **UTM** (Universal Transverse Mercator) and a datum that matches the maps you have (either AGD66/ AGD84 for old maps or ***GDA94/WGS84*** for new maps). When you do this, your GPS will read out positions in metres east and north instead of degrees of lat/lon. It will also display the GPS zone you're in. Canberra is in zone 55, Sydney is in zone 56.

Once your GPS is set up to use UTM, it will display positions such as:

56 268124 E
6319325 N

To convert these to a grid reference on your topographic map, look at the **last 5 digits** of each co-ordinate. i.e 68124 and 19325. Now, the **first 2 digits in each number is the grid square** where you are on the map, and the **3rd digit** in each is the **sub-square location**. So, in this case your grid reference will 681193.

Australian GPS Zones