

TRIANGLE OF ERROR

1. IF THE TRIANGLE OF ERROR IS INSIDE THE TRIANGLE FORMED BY THE THREE FEATURES (ABC), YOUR TRUE POSITION WILL BE INSIDE THE TRIANGLE OF ERROR. IF THE TRIANGLE OF ERROR IS OUTSIDE THE TRIANGLE ABC, THEN YOUR TRUE POSITION WILL BE OUTSIDE THE TRIANGLE OF ERROR;
2. IF THE TRIANGLE OF ERROR IS OUTSIDE THE TRIANGLE FORMED BY THE THREE FEATURES, ABC, THEN YOUR TRUE POSITION WILL BE EITHER TO THE LEFT OR RIGHT WHEN FACING THE FIXED POINTS OF ALL THE LINES DRAWN ON THE MAP FROM THE RESPECTIVE FEATURES THROUGH THE TRIANGLE OF ERROR; AND
3. REGARDLESS OF WHETHER YOUR TRUE POSITION IS INSIDE OR OUTSIDE THE TRIANGLE OF ERROR, THE DISTANCE FROM THAT POSITION TO THE LINES WILL BE DIRECTLY PROPORTIONAL TO THE LENGTH OF THE LINES (THAT IS, YOUR POSITION WILL BE NEAREST TO THE SHORTEST LINE AND FURTHEST FROM THE LONGEST LINE). DEPENDING ON THE SIZE OF THE TRIANGLE OF ERROR, YOUR POSITION WITHIN THE TRIANGLE CAN BE WORKED OUT EXACTLY BY THIS METHOD. BY APPROXIMATIONS, YOUR TRUE POSITION CAN BE CONFIRMED BY RELATING THE MAP TO THE GROUND.