To locate earthquakes in 2-D we need:
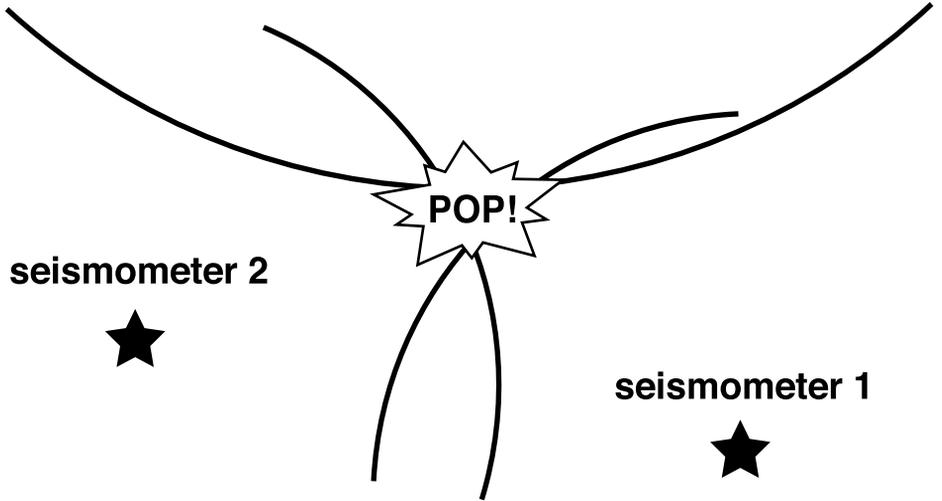1. P wave velocity of the crust
2. S wave velocity of the crust
3. accurate and synchronized clocks