The Airplane Riddle

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HOW SHOULD THE THREE PLANES COORDINATE

SO THE PROFESSOR CAN FLY CONTINUOUSLY FOR THE WHOLE TRIP,
WITHOUT ANYONE RUNNING OUT OF FUEL AND CRASHING?





- 1. The professor's plane must make a single continuous trip around the world without landing or turning around.
- 2. Each plane can travel exactly 1 degree of longitude in 1 minute for every kiloliter of fuel.
- 3. Any plane can refuel any of the others in mid-air by meeting at the same point and instantly transferring any amount of fuel.
- 4. Fugori and Orokana's planes can turn around instantaneously without burning fuel.
- 5. Only one airport is available for any of the planes to land, take off, or refuel.
- 6. All three planes must survive the experiment, and none may run out of fuel in mid-air.

Vocabulary

un huitième: one eighth un voyage: a journey atterrir: to land

décoller: to take off atteindre: to reach

être plein de: to be loaded with

contenir: to hold

se ravitailler (en carburant): to refuel une jauge: gauge (pronunciation [gei])

invariablement: consistently à condition que: provided

être à court de, venir à manquer de: to run out of de justesse, de peu, à un cheveu près: by a hair

réussir, y arriver: to pull it off

Stress Placement

coordinate
calculate
calculations
permission
located
continuously
professor
identical
experiment

Hypotheses: