

## Time Zones (1)

### Let's investigate

The time difference between where Marco and Cody live is 3 hours, Marco's time is ahead of Cody's.

They have a telephone conversation for 1 hour and 18 minutes. Cody puts the phone down at 20:44.

What was the time for Marco when he rang?

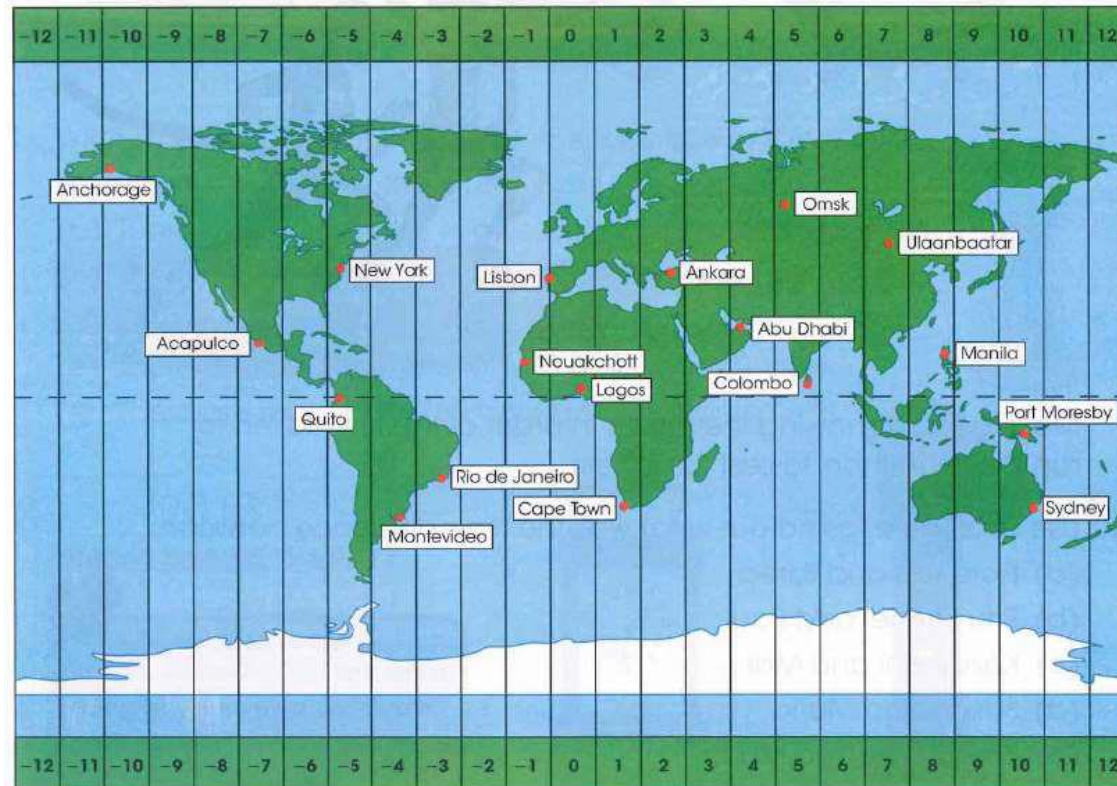


### Vocabulary

**time zone:** area of the world with a common time. There are 24 time zones.

**universal time:** the time standard, originally measured at Greenwich, England, sometimes called Greenwich Mean Time (GMT).

This map shows *approximately* the time zones around the world. It shows how far ahead or behind the time is in hours from the Universal Time at '0'.



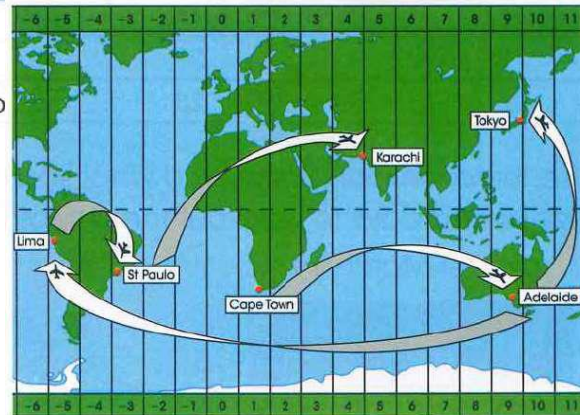
- What is the approximate time difference in hours between:
  - Quito and Lisbon?
  - Anchorage and Colombo?
  - Cape Town and Ulaanbaatar?
  - Nouakchott and Sydney?
- Use the map to estimate:
  - If it was 09:21 in Lagos, what would be the time in Omsk?
  - If it was 01:44 in Acapulco, what would be the time in Port Moresby?
  - If it was 18:03 in Rio de Janeiro, what would be the time in Ankara?
  - If it was 20:18 in Manila, what would be the time in Colombo?

This is a Flight Timetable. Use the information in the timetable (and the time differences) to work out the length of time, in hours and minutes, of each journey (a) to (e).

	Departure city	Destination city	Departure time at departure city	Arrival time at destination city
(a)	Lima	Sao Paulo	13:45 (Mon)	20:35 (Mon)
(b)	Adelaide	Tokyo	17:35 (Weds)	06:05 (Thurs)
(c)	Sao Paulo	Karachi	01:25 (Tues)	04:30 (Weds)
(d)	Cape Town	Adelaide	18:05 (Fri)	22:25 (Sat)
(e)	Adelaide	Lima	09:30 (Sat)	00:20 (Sun)

First work out what the time is in the arrival city at the time when the plane leaves the departure city, and then work out the time interval between this time and the arrival time.

For example, for part (a) you need to calculate how long the journey is from Lima to Sao Paulo. The departure time in Lima is 13:45, so the time in Sao Paulo at that time would be 15:45 because it is 2 hours ahead of Lima. Draw a time line:



So the journey takes 4 hours and 50 minutes.