

# Time Zones

You need: an atlas that shows time zones, a telephone directory or the Internet white pages, access to the Internet (optional)

## ACTIVITY

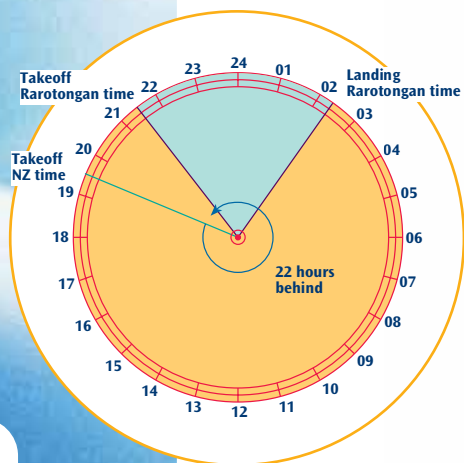
Taine has the overseas holiday bug! He knows that, due to the rotation of the Earth, night and day occur at different times throughout the world. For example (ignoring the effect of daylight saving), when it is 1500 (daytime) in New Zealand, it is 0300 (night-time) in the United Kingdom.

During his holiday, Taine wants to fly for no longer than 12 hours one way. He is considering his latest ideas for a destination.

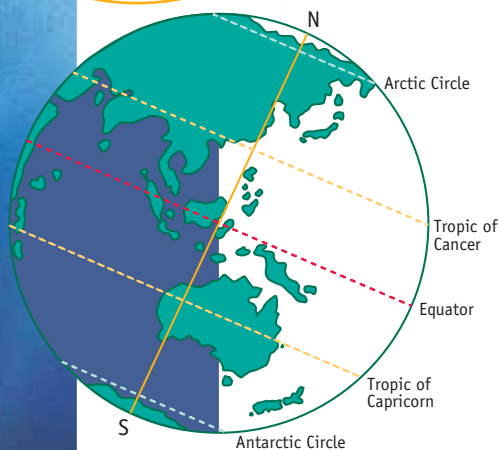


These airline timetables give departure and arrival times at each airport in local time, but they don't say how long the flight is.

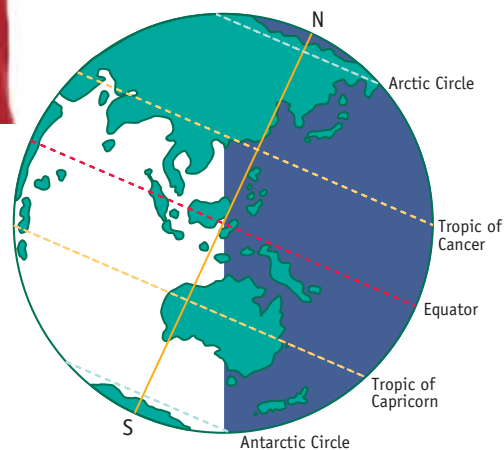
Flight NZ048 leaves Auckland at 1930 New Zealand time and arrives in Rarotonga at 0220 local time. Rarotongan time is 22 hours behind New Zealand time.



So, flight NZ048 leaves at 2130 Rarotongan time and lands at 0220 Rarotongan time. That's a flight of 4 hours and 50 minutes.



Midwinter: June 22  
(Southern Hemisphere)



Midsummer: December 22  
(Southern Hemisphere)

1. Here are the departure and arrival times of several international flights from Auckland airport. The times are given in local time (the time in the city you are leaving from or arriving at).

	Flight	Destination	Departure time (New Zealand)	Arrival time (destination)
a.	TG 992	Bangkok	1430	2230
b.	QF 25	Los Angeles	1940	1030
c.	PH 732	Apia, Samoa	0445	0935
d.	NZ 121	Melbourne	0645	0845
e.	JL 099	Tokyo	0930	1625
f.	BA 0268	London	1940	1515

Your telephone directory provides time difference information (excluding daylight saving). Use this information to work out the length of each flight in hours and minutes.

2. These passengers have just arrived at international airports. Work out the departure time of their flight in local time.

a.

I've just landed in Hong Kong, and it's 1430 local time. The flight from Sydney took 9 hours.



b.

It's 1645 here in Madrid. My flight from New York took 7 hours.



c.

It's great to be in Rome! It was a short 2 hour flight from Paris. I got here at 0745 local time.



d.

I flew to Rio de Janeiro for the carnival. My flight from Los Angeles took 16 hours. When I arrived, it was 1100 Rio time.



#### Time Differences

Sydney to Hong Kong	- 2
New York to Madrid	+ 6
Los Angeles to Rio de Janeiro	+ 5
Paris to Rome	0

3. Taine wants to do a lot of sightseeing on his holiday. Keeping in mind his 12 hour flight restriction, what destinations could you recommend?