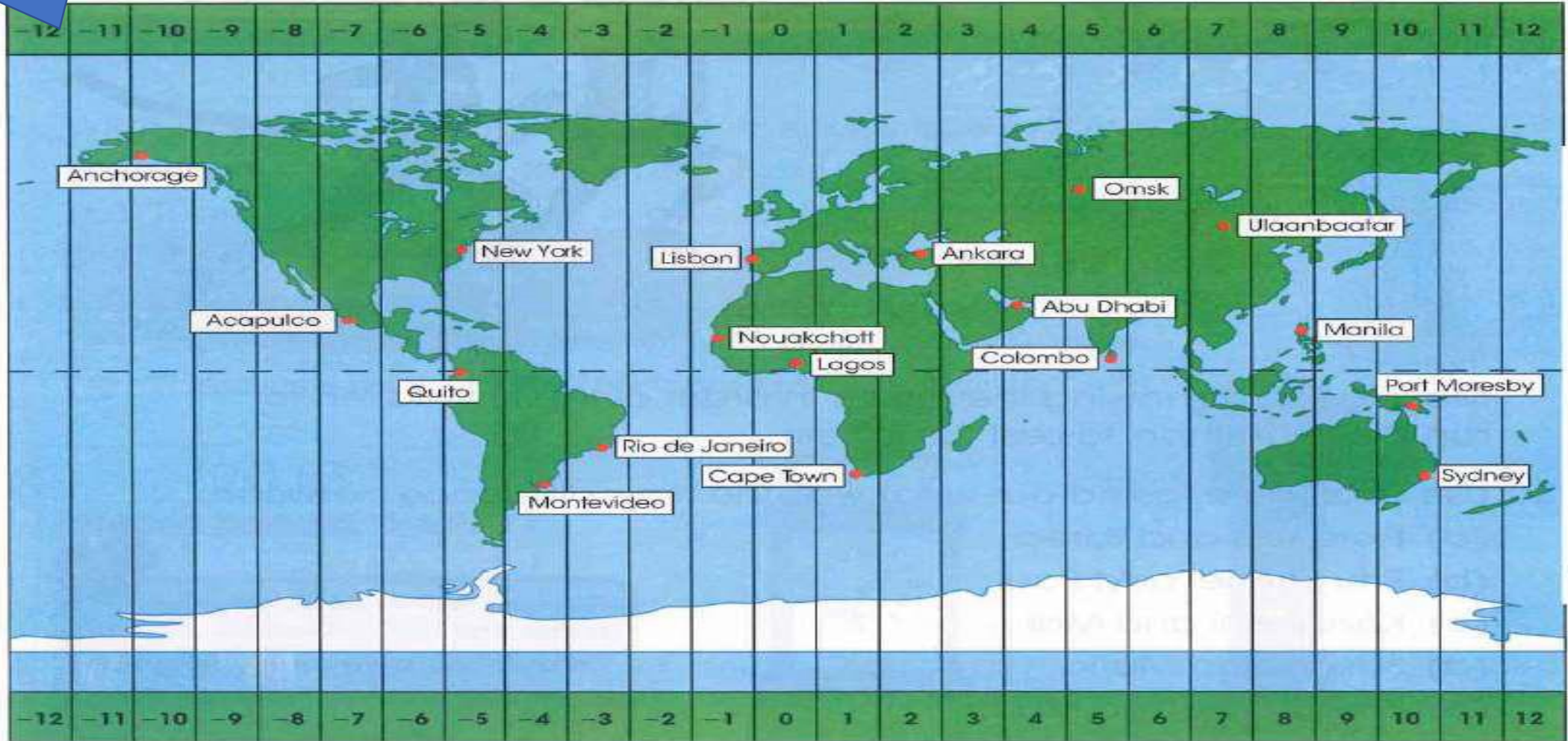






This map shows *approximately* the time zones around the world. It shows how far ahead or behind the time is in hours from the Universal Time at '0'.



# Why do we have different time zones?





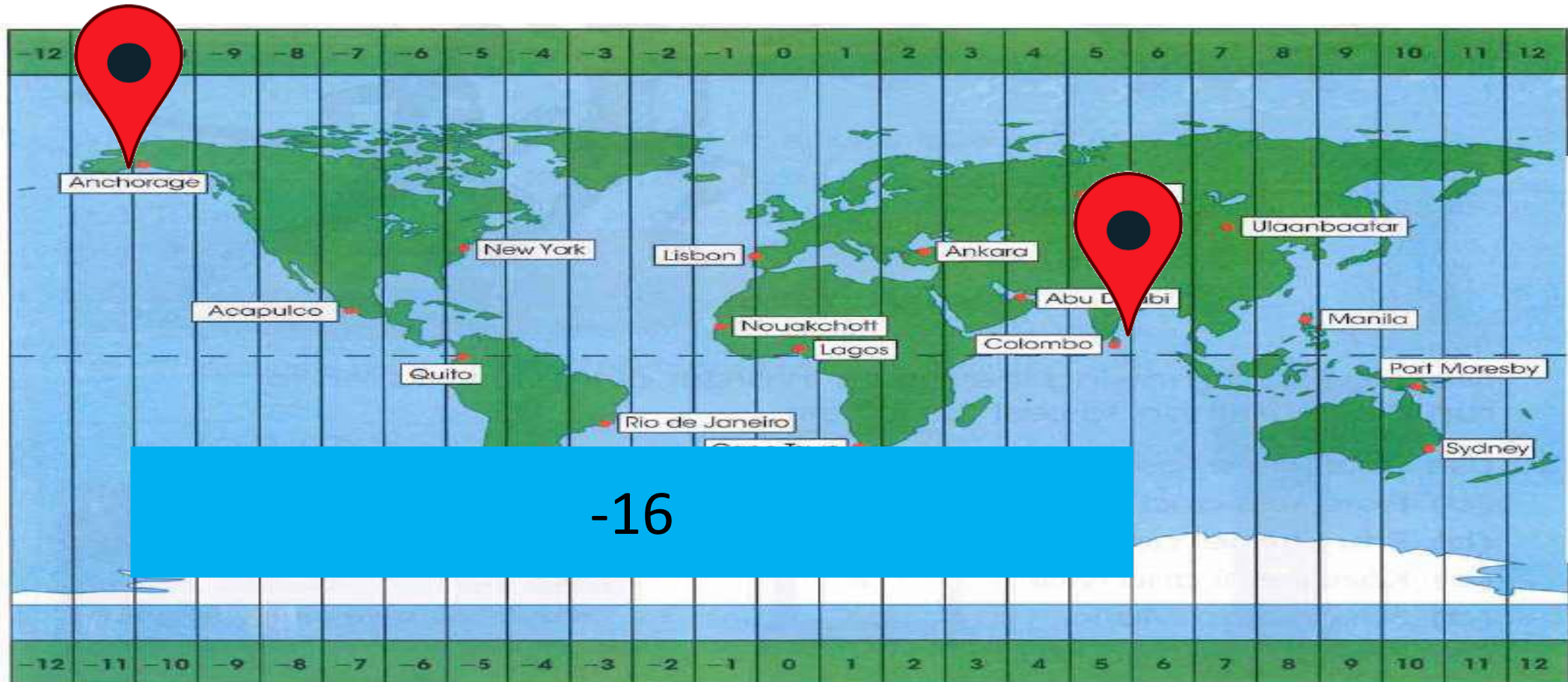
1 What is the approximate time difference in hours between:

- (a) Quito and Lisbon?
- (b) Anchorage and Colombo?
- (c) Cape Town and Ulaanbaatar?
- (d) Nouakchott and Sydney?



1 What is the approximate time difference in hours between:

- (a) Quito and Lisbon?
- (b) Anchorage and Colombo?
- (c) Cape Town and Ulaanbaatar?
- (d) Nouakchott and Sydney?





1 What is the approximate time difference in hours between:

- (a) Quito and Lisbon?
- (b) Anchorage and Colombo?
- (c) Cape Town and Ulaanbaatar?
- (d) Nouakchott and Sydney?





1 What is the approximate time difference in hours between:

- (a) Quito and Lisbon?
- (b) Anchorage and Colombo?
- (c) Cape Town and Ulaanbaatar?
- (d) Nouakchott and Sydney?

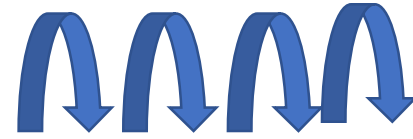




2 Use the map to estimate:

(a) If it was 09:21 in Lagos, what would be the time in Omsk?

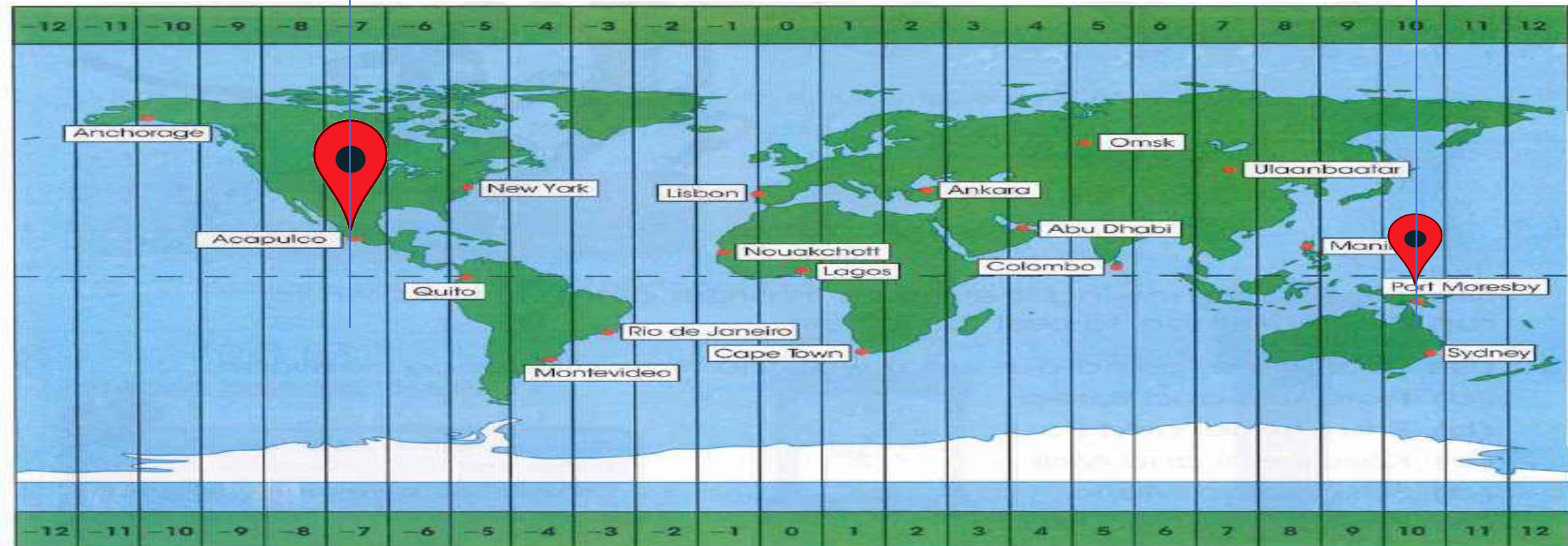
$$9:21 + 4 = 13.21$$





(b) If it was 01:44 in Acapulco, what would be the time in Port Moresby?

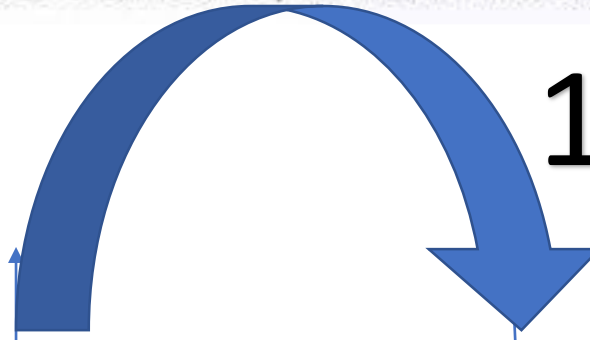
$$1:44 + 17 = 18:44$$





(c) If it was 18:03 in Rio de Janeiro, what would be the time in Ankara?

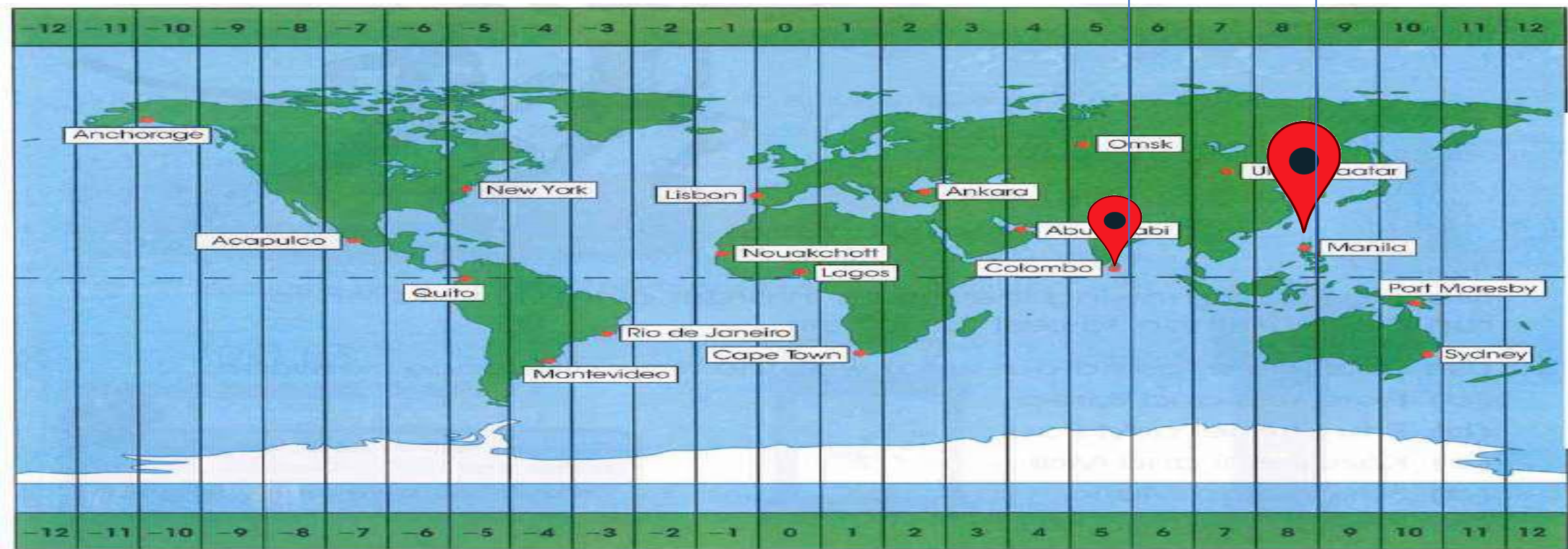
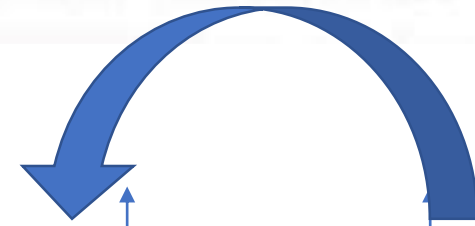
$$18:03 + 5 = 23:03$$





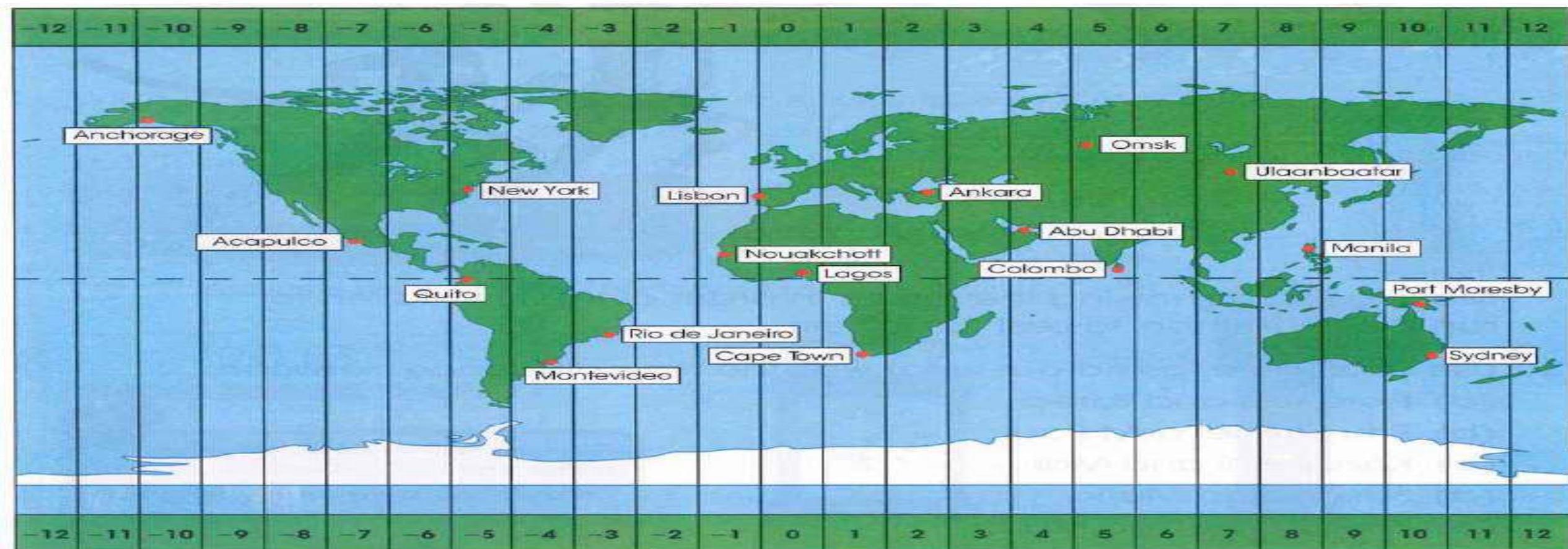
(d) If it was 20:18 in Manila, what would be the time in Colombo?

$$20:18 - 3 = 17:18$$





Find two cities with (4 h) time difference.  
Find two cities with (1 h ) time difference.  
Find two cities with (NO) time difference.



	Departure city	Destination city	Departure time at departure city	Arrival time at destination city	First work out what the time is in the arrival city at the time when the plane leaves
(a)	Lima	Sao Paulo	13:45 (Mon)	20:35 (Mon)	

The time in Sao Paulo is 2 hours **ahead** of Lima.  
 Look at the time table above. How long was the journey?

1. Find : It was (13:45 + 2 = 15:45) in Sao Paulo.

When it was 13:45, what time was it in Sao Paulo?

2. Find :  $20:35 - 15:45 = 4 \text{ hours } 50 \text{ minutes}$

How long was the journey?  
 (the arrival time - the departure time = ?)





(d)	Cape Town	Adelaide	18:05 (Fri)	22:25 (Sat)	interval between this time and the
-----	-----------	----------	-------------	-------------	---------------------------------------

The time in Cape Town is 8 hours **behind** Adelaide.  
How long was the journey?



1. Find :

When it was 18:05, what time was it in Adelaide?

$$18:05 - 8 = 10$$

2. Find :

How long was the journey?  
(the arrival time - the departure time = ?)

$$22:25 - 10 = 10 \text{ h } 25 \text{ min}$$

(e)	Adelaide	Lima	09:30 (Sat)	00:20 (Sun)	arrival time.
-----	----------	------	-------------	-------------	---------------

The time in Adelaide is 4 hours **ahead** of Lima.  
How long was the journey?