

## Maths homework – time problem solving investigations



Phoebe's watch loses two minutes every hour.



Joey's watch gains one minute every hour.

They both set their watches from the radio at 6:00 a.m. then start their journeys to the airport. When they arrive (at the same time) their watches are 9 minutes apart.

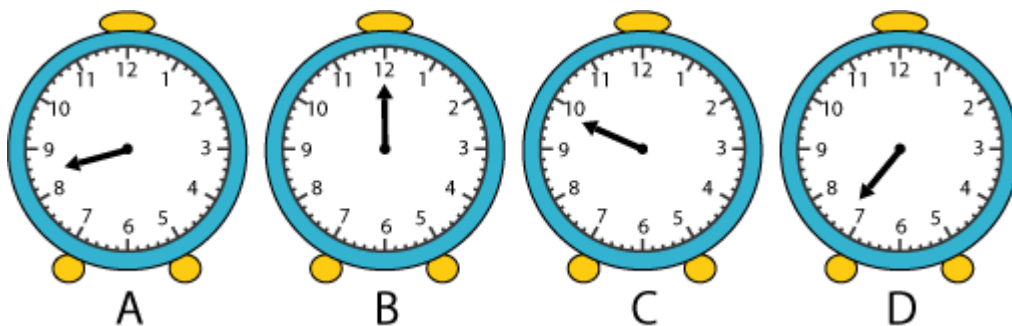
At what time (the real time) did they arrive at the airport?

A table similar to below may help.

Real time	Time on Phoebe's watch (- 2 mins per hour)	Time on Joey's watch (+1 min per hour)	Difference
6.00am	6.00am	6.00am	0 minutes
7.00am	6.58am	7.01am	3 minutes

Ross has a rather odd clock at home.

In his bedroom there is an old alarm clock which his Dad had thrown out because it had lost its minute hand. Although it has only its small hand, Ross can still tell the time using it (look carefully at the hour hand!). He can tell the hour, such as midday. He can tell when it is time to get up, time to go to school and time to turn his light out at night.



Which clock is showing it is midday?

At what time does Sam get up?

At what time does Sam go to school?

At what time is Sam supposed to turn out his light?

**Optional extra: There is an interactive game called 'Approaching Midnight' that you can play at: <https://rich.maths.org/10781>**