Wednesday

24.06.2020

Good morning Longboats, how are you today?

Main Activity

As always, start with the activity you think will work best for you and then try a challenge if you want to.



The traffic on the way to Angela's work is terrible! It should twenty five minutes to drive to work but here are her departure and arrival times for the last 6 days. Can you count on to work out how long the journey took each day?

This interactive clock might help you to count on more easily.

https://mathsframe.co.uk/en/resources/resource/90/itp-clock

Angela's departure	journey time	Angela's arrival
07:45		08:15
07:30		07:55
07:50		08:22
07:43		08:41
07: 58		08:32
07:46		08:03

Terry is designing a brand new airport with two runways. He has spoken to lots of different airlines and got ten flights that could go from his airport in Leicester.

Destination	Athens (Greece)	New York (USA)	Tenerife	Lagos (Nigeria)
Departure time	09:50	12:15	10:20	15:30
Destination	Melbourne (Australia)	Paris (France)	Bali	Mumbai (India)
Departure time	06:45	18:15	11:15	19:20

It takes 30 minutes for each plane to be cleaned and refuelled (which happens on the runway). Then, it takes 20 minutes to get all the passengers on board and do a safety check. Finally, it takes 8 minutes to taxi down the runway and lift off safely.

1. Terry wants to know how long he needs to give each plane on the runway before its take off time. Can you work it out?

- 2. What time would the plane for Athens start needing the runway?
- 3. What time would the plane for Paris start needing the runway?
- 4. Can you put the planes in order throughout the day?

Do the square activity before you start this one.

1. Terry only has two runways at his airport so he needs to make sure that all the flights would be able to get ready and take off at the right times. Can you design a timetable to show Terry how to make sure no flights are delayed? *Remember – each plane needs preparation time, as stated in the square problem.*

You could design your timetable to look like this...

Runway 1:	Destination:	Destination:	Destination:	Destination:	Destination:
	Prep time:				
	Take off:				
Runway 2:	Destination:	Destination:	Destination:	Destination:	Destination:
	Prep time:				
	Take off:				



continued...

2. Terry plans to close the airport at 18:00 each day so his staff don't have to work night shifts. How many more flights could he book to fill the day up?

3. Time when the runways are empty is a waste of money! What is the longest gap between flights on your timetable – is there way you could rearrange so that flights are closer together and Terry could book more flights in?