N5 Applications of Mathematics

Time Management

After a meeting in Beijing, Jennifer flies home to London via Amsterdam. The plane leaves Beijing on 3 February at 12:15 local time. The plane lands in Amsterdam on 3 February at 18:00 local time. Beijing is 7 hours ahead of Amsterdam. 1 (a) Calculate the time taken for Jennifer's flight from Beijing to Amsterdam. Give your answer in hours and minutes. On landing in Amsterdam, Jennifer's phone tells her the time and date in the following cities. 2019 PI Q9 Amsterdam, Netherlands 18:00 3 Feb London, United Kingdom 17:00 3 Feb Miami, United States of America 12:00 3 Feb Jennifer plans to telephone her brother as soon as she gets home. She will arrive at her home, in London, at 23:15 local time. Her brother lives in Miami, and arrives home from work at 17:00 local time. 2 (b) Determine whether her brother will be home from work when Jennifer makes the phone call. Use your working to justify your answer. (a) 12 hours and 45 minutes (b) 23:15 - 5 hours = 18:15 Yes, the call will be made at 18:15 in Miami The factory manager thinks that the whole process can be completed in less 2018 P2 Q9(b) than 25 minutes. (b) Based on the times given, is the factory manager correct? 3 Use your working to justify your answer. yes, it takes 20 minutes 15 seconds or yes, it takes 20.25 minutes Ans

	Steven flew to Hong Kong to start a new job. The flight included a stop in Doha.							
	He flew from Edinburgh to Doha then from Doha to Hong Kong.							
60 1	The flight from Edinburgh to Doha took 6 hours 35 minutes.							
2018 PI Q9	 The flight from Doha to Hong Kong took 7 hours 20 minutes. 							
7(Hong Kong is 8 hours ahead of Edinburgh.							
	Steven's plane took off from Edinburgh at 9:15 am local time.							
	It landed in Hong Kong at 8:50 am local time.	3						
	How long was the stop in Doha?							
Ans	1 hour 40 minutes							
2017 P2 Q7	Mr Mackenzie accepts the job in Durban.							
	As part of his job he is in contact with the London, New York and Mumbai offices of the company he works for.							
	He is planning a conference call at 3:30 pm the following day, from his office in Durban.							
	At 17:25 he noticed the clocks on the wall of his office showed the times below.							
	10:25 15:25 17:25 22:55 New York London Durban Mumbai							
	New York Zondon Sarban Manibal							
	All offices work 08:00 to 18:00 local time.							
	(c) Which offices are available to take part in the conference call?	3						

New York and London

Chris flew from Perth, Australia, to London, United Kingdom, on Saturday 9th January 2016.

- The plane left Perth, Australia, at 13:05.
- The total journey time, including a stopover in Dubai, is 20 hours and 25 minutes.
- · Perth time is 8 hours ahead of London.

At what time did the plane land in London?

2

Ans 01:30 (on Sunday 10th)

2016 P2 Q2

2016 PI Q3

Gary lives in Biggar and has to go to a meeting in Edinburgh.

He plans to travel to his meeting by bus.

He uses this bus timetable to plan his journey.

Monday to Friday												
Route Number	101	101	101	101	101	102	101	101	101	101	101	102
Dumfries Whitesands Stance 4		0535	0710		0910	1025			1315			1815
Heathhall		0543	0720		0920				1325			
Amisfield Main Rd		0547	0725		0925				1330			
Parkgate		0552	0730		0930	İ			1335			ĺ
St Ann's		0557	0736		0936				1341			1
Beattock Primary School		0606	0745		0945	İ			1350			i
Moffat High St Stance 2		0612	0752		0952	İ			1357			İ
Holywood		-	1		-	1031			1			1821
Auldgirth		İ			İ	1039						1829
Closeburn		İ	i			1046			İ			1836
Thornhill Cross		i				1050						1840
Durisdeermill		İ	Ĺ		Ĺ	1100			İ			1850
Troloss						1105						1855
Elvanfoot		İ	1		- I	1117			- I			1907
Crawford		0633	0813		1013	1128			1418			1913
Abington Village		0640	0820		1020	1135			1425			1920
Abington Service Area		0646	0827		1027	1142			1432			1927
Roberton		0651	0832		1032	1147			1437			1932
Lamington		0657	0838		1038	1153			1443			1938
Coulter		0702	0843		1043	1158			1448			1943
Biggar	0633	0709	0853	0953	1053	1208	1253	1353	1458	1623	1803	1953
Dolphinton	0644	0721	0905	1004	1104	1219	1304	1404	1509	1634	1814	2004
West Linton	0651	0731	0915	1011	1111	1226	1311	1411	1516	1641	1821	2011
Carlops	0655	0735	0920	1015	1115	1230	1315	1415	1520	1645	1825	2015
Silverburn	0702	0741	0927	1021	1121	1236	1321	1421	1526	1651	1831	2021
Penicuik Town Centre Stop C	0707	- 1	0932	1026	- 1	1241	1326		- 1	1656	1836	2026
Flotterstone	0717	0746	0942	1036	1126	1251	1336	1436	1531	1706	1846	2034
Fairmilehead, Swanston Drive	0724	0753	0948	1042	1132	1257	1342	1442	1537	1712	1852	2039
Morningside Station	0732	0801	0956	1050	1140	1305	1350	1450	1545	1720	1900	2045
Tollcross	0740	0809	1004	1058	1148	1313	1358	1458	1553	1728	1908	2050
Lothian Road, Caledonian Hotel	0749	0818	1011	1104	1154	1319	1404	1504	1600	1735	1914	2055
Edinburgh Bus Stance E	0801	0830	1021	1114	1204	1329	1414	1514	1611	1745	1924	2102

2

Ans	0853 (from Biggar)	
2015 PI Q2	Usain flies from London to Moscow for a business meeting. The plane leaves London at 1845. The flight takes 3 hours and 40 minutes. Moscow time is 4 hours ahead of London. It should take 45 minutes to collect his luggage and clear security. His company arranges for a driver to collect him from Moscow Airport. At what time should the driver expect to collect Usain?	2
Ans	0310/3·10am	