MASTER MATHS GCSE

GCSE Mathematics 9-1

Time

(Non-Calculator)

Mark Scheme

Total available marks: 40

Q	Answer	Working	Mark
1	180 minutes	1 hour = 60 minutes 3 × 60 = 180	1
2	7 minutes	1 minute = 60 seconds 420 ÷ 60 = 7	1
3	96 hours	1 day = 24 hours 4 × 24 = 96	1
4	2 hours 30 minutes	0.5 of an hour = half of 60 minutes = 30 minutes	1
5	105 minutes	1 hour = 60 minutes, ¾ of an hour = 45 minutes 60 + 45 = 105	1
6	3 hours 20 minutes	3 × 60 = 180 minutes 200 − 180 = 20 minutes left over	1
7	465 seconds	7 × 60 = 420 seconds 420 + 45 = 465	1
8	17:20	For pm times (after 1 pm), add 12 to the hours 5 + 12 = 17	1
9	8:05 am	The hours are less than 12, so it is in the morning (am)	1
10	11:40 pm	The hours are more than 12, so take away 12 and use pm 23 − 12 = 11	1
11	1.75 hours, 125 minutes, 2 hours 10 minutes, 8100 seconds	Change them all to minutes: 2 hours 10 minutes = 130, 125 minutes = 125 8100 seconds = 8100 ÷ 60 = 135, 1.75 hours = 60 + 45 = 105	1
12	14 hours 30 minutes	6:30 am to 12 noon = 5 hours 30 minutes 12 noon to 9 pm = 9 hours 5 h 30 min + 9 h	2
13	16:45	45 + 15 + 45 = 105 minutes = 1 hour 45 minutes 15:00 + 1 hour 45 minutes	2
14	1 hour 25 minutes	09:47 to 10:00 = 13 minutes 10:00 to 11:12 = 1 hour 12 minutes 13 minutes + 1 hour 12 minutes	2

Q	Answer	Working	Mark
15	4:40 pm	Count back from 6:15 pm 6:15 pm − 1 hour = 5:15 pm 5:15 pm − 35 minutes = 4:40 pm	2
16	10:43 pm	8:25 pm + 2 hours = 10:25 pm 10:25 pm + 18 minutes = 10:43 pm	2
17	14:25	Lessons: 5 × 55 = 275 minutes Total: 275 + 20 + 45 = 340 minutes = 5 hours 40 minutes 08:45 + 5 hours 40 minutes	3
18	5 hours 50 minutes	Two weeks = 14 days 14 × 25 = 350 minutes 350 = 5 × 60 + 50	2
19	92 days	March 31 + April 30 + May 31	1
20(a)	Tuesday	18 − 4 = 14 days = exactly 2 weeks later	1
20(b)	Thursday	27 − 4 = 23 days = 3 weeks and 2 days Tuesday + 2 days	1
21(a)	49 minutes	08:40 to 09:29 08:40 to 09:00 = 20 minutes, 09:00 to 09:29 = 29 minutes	1
21(b)	18 minutes	The next bus at Market Square is 08:53 08:35 to 08:53	1
21(c)	08:40	The 08:40 bus reaches the Hospital at 09:06 The 10:05 bus is too late	1
22	13 minutes 28 seconds	Ben: 12 min 48 s + 1 min 15 s = 14 min 3 s Cara: 14 min 3 s − 35 s = 13 min 28 s	2
23	11:04	Slow means it is behind the real time, so add 12 minutes 10:52 + 12 minutes	1
24	160 toys	2 hours = 120 minutes = 7200 seconds 7200 ÷ 45 = 160 (or 4 toys every 3 minutes, 120 ÷ 3 × 4)	2

Q	Answer	Working	Mark
25	17:55	London time when it lands: 14:20 + 2 hours 35 minutes = 16:55 Rome is 1 hour ahead: 16:55 + 1 hour	2
26	Yes, 0.5 hours is half an hour, which is 30 minutes	0.5 hours = half an hour Half of 60 minutes = 30 minutes (or $0.5 \times 60 = 30$)	1

Total available marks for this paper	**40**