

Answer Key — Converting 12-hr to 24-hr Time

Year 4 Mathematics · Measurement and geometry · WA4MMGT11

Section A — Fluency (16 marks, 1 mark each)

1. 03:45
2. 15:45
3. 07:00
4. 19:00
5. 09:30
6. 21:30
7. 12:00
8. 00:00
9. 13:15
10. 01:15
11. 18:50
12. 11:05
13. 23:05
14. 16:40
15. 10:20
16. 20:35

Section B — Core (21 marks)

1. 19:30. [3 marks]
2. (a) 2:45pm. (b) Afternoon. [2 marks part (a), 2 marks part (b)]
3. 09:00. [3 marks]
4. (a) 11:10pm. (b) Close to midnight. [2 marks part (a), 2 marks part (b)]
5. 15:20. [3 marks]
6. (a) 5:45pm. (b) No — 6:00pm (18:00) is after the 17:45 closing time, so the library is already closed. [2 marks part (a), 2 marks part (b)]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. For pm times other than 12pm, add 12 hours to the hour part; 4:30pm becomes $4+12=16$, so the 24-hour time is 16:30. [2 marks]
2. 12:00pm is already midday, which falls at the halfway point of the 24-hour clock, so it keeps the number 12; 00:00 is reserved for midnight, the very start of the day. [2 marks]
3. The student forgot to add 12 hours for the pm time; the correct 24-hour time is $9+12=21$, giving 21:15. [2 marks]
4. False — most am times do keep the same numbers (e.g. 3:45am = 03:45), but 12:00am (midnight) is the one exception, converting to 00:00 instead of staying as 12:00. [3 marks]

Section D — Challenge (7 marks)

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1. 6:20pm. [2 marks]
2. 23:55, which is 5 minutes before midnight. [2 marks]
3. (a) 15:45. (b) 3:45pm. [2 marks part (a), 1 mark part (b)]