FUNCTIONAL SKILLS MATHEMATICS

AQA | Edexcel | City & Guilds | Open Awards | NCFE | Highfield

Level 1

Time

Materials

- You **cannot** use a calculator for **questions** with this symbol.

Instructions

- Answer **all** questions.
- Answer questions on separate paper.

Information and Advice

- The marks for each question are shown in brackets – use this as a guide on how long to spend on each question.
- Read each question carefully before you answer it.
- Check you answers.

Q1   Convert the following amounts of time.

1(a)   60 s in minutes

[1 mark]

1(b)   180 s in minutes

[1 mark]

1(c)   60 min in hours

[1 mark]

1(d)   240 min in hours

[1 mark]

1(e)   300 s in minutes

[1 mark]

1(f)   3600 s in minutes

[1 mark]

1(g)   24 hr in days

[1 mark]

1(h)   72 hr in days

[1 mark]

1(i)   7200 s in minutes

[1 mark]

1(j)   168 hr in days

[1 mark]

10

Turn over ▶

Q2   Convert the following amounts of time.

2(a)   7 days in weeks

<div align="right">**[1 mark]**</div>

2(b)   56 days in weeks

<div align="right">**[1 mark]**</div>

2(c)   12 months in years

<div align="right">**[1 mark]**</div>

2(d)   2 weeks in days

<div align="right">**[1 mark]**</div>

2(e)   3 years in months

<div align="right">**[1 mark]**</div>

2(f)   4 hr in minutes

<div align="right">**[1 mark]**</div>

2(g)   28 min in seconds

<div align="right">**[1 mark]**</div>

2(h)   3600 s in hours

<div align="right">**[1 mark]**</div>

2(i)   336 hr in weeks

<div align="right">**[1 mark]**</div>

2(j)   3 weeks in hours

<div align="right">**[1 mark]**</div>

10

Q3   Convert these 12-hour times into 24-hour times.

3(a)   3:45 am

                                                                                    [1 mark]

3(b)   3:45 pm

                                                                                    [1 mark]

3(c)   11:15 am

                                                                                    [1 mark]

3(d)   8:20 pm

                                                                                    [1 mark]

3(e)   4:45 pm

                                                                                    [1 mark]

3(f)   5:25 am

                                                                                    [1 mark]

3(g)   12:40 pm

                                                                                    [1 mark]

3(h)   12:10 am

                                                                                    [1 mark]

3(i)   2:30 pm

                                                                                    [1 mark]

3(j)   9:50 pm

                                                                                    [1 mark]

Q4   Convert these 24-hour times into 12-hour times.

4(a)   15 : 25

                                                                    [1 mark]

4(b)   18 : 40

                                                                    [1 mark]

4(c)   09 : 45

                                                                    [1 mark]

4(d)   08 : 20

                                                                    [1 mark]

4(e)   00 : 05

                                                                    [1 mark]

4(f)   23 : 55

                                                                    [1 mark]

4(g)   03 : 30

                                                                    [1 mark]

4(h)   10 : 45

                                                                    [1 mark]

4(i)   16 : 10

                                                                    [1 mark]

4(j)   17 : 35

                                                                    [1 mark]

Q5   Abraham has arranged the following timetable for travelling to Spain.

Leave home	05:00
Arrive at train station	05:20
Train leaves	05:30
Arrive at Manchester airport	07:45
Plane leaves	09:45
Plane arrives in Barcelona airport	11:25
Bus to the resort leaves	12:15
Arrive at the resort	13:30

5(a)   How long does it take Abraham to get from home to the train station?

[2 marks]

5(b)   How long does Abraham spend in Barcelona airport?

[2 marks]

5(c)   How long after boarding the train does Abraham board a bus?

[2 marks]

5(d)   How long does Abraham's whole journey take?

[2 marks]

Q6   Eleanor has a number of important meetings to go to, starting at 09:00 am.

6(a)   Her first meeting is 1 hour and 15 minutes long. If the meeting starts at 9:00 am, what time does it finish?

[2 marks]

6(b)   After her first meeting, she then gets a drink from a coffee shop, which takes 20 minutes. What time is it after her drink?

[2 marks]

6(c)   Eleanor's second meeting lasts 2 hours 30 minutes. What time does it end?

[2 marks]

6(d)   She then takes lunch, which takes 1 hour. What time does she finish lunch?

[2 marks]

6(e)   Her final meeting runs for 2 hours, then she takes 30 minutes to get home. What time does she arrive at home?

[3 marks]

Q7   Kristen is going on a coach trip from her home in Nottingham to London.

7(a)   She leaves her house at 5:30 am, and the coach leaves at 5:50 am. If she can walk 100 m in a minute and her house is 1600 m from the coach stop, can she make it?

[3 marks]

7(b)   It takes four hours for a coach to get to London from Nottingham. The coach stops at a service station on the way. If Kristen gets to London at 10:20 am, how long does the stop at the service station last?

[2 marks]

7(c)   In London, Kristen has a list of things she wants to do. She wants to allow 1 hour for every activity, which includes travel time. If the coach leaves London at 18:00, how many activities can she do in this time?

[2 marks]

7(d)   Kristen finds that she takes more time for some activities and less time for others than her scheduled 1 hour. If her tour of Parliament starts at 11:50 am and lasts until 1:10 pm, was this longer or shorter than an 1 hour? By how much?

[2 marks]

7(e)   Kristen's final activity is the British Museum. She arrives at 4:45 pm and the museum closes at 17:30. What is the maximum time she could spend in the museum?

[1 mark]

7(f)   With heavier traffic in the evening, the coach journey back is expected to take 270 minutes. What is this in hours?

[1 mark]

7(g)   The journey actually takes 5 hours, due to a stop at a service station. How long did the stop at the service station last, and what time does the coach return to Nottingham?

[2 marks]

7(h)   Given that Kristen starts walking immediately when she gets off the coach, and using figures from part (a), find what time it is when she arrives home.

[2 marks]

Q8   Tony is making invites for his upcoming wedding, while his partner Den is cooking dinner.

8(a)   Den's recipe says he needs 25 minutes to prepare dinner and 35 minutes to cook dinner. How long does the recipe take in total to make?

[1 mark]

8(b)   Each wedding invite takes Tony 10 minutes to make. How many will he have made by the time Den has cooked dinner?

[1 mark]

8(c)   Den's recipe calls for preheating the oven 20 minutes before cooking is to occur. How long after beginning preparation should he preheat the oven?

[1 mark]

8(d)   Den forgets to preheat the oven until 15 minutes into preparation time, so when preparation is done he must wait for the oven to finish preheating.

8(d)(i)   How long must he wait once preparation is done?

[1 mark]

8(d)(ii)   How long does dinner take to make overall now?

[1 mark]

8(d)(iii)   How many invites will Tony have been able to make by the time dinner is ready?

[1 mark]

8(e)   Tony and Den both work on invites after dinner. Den works at the same rate as Tony. If there were 25 to make altogether, and they both work from $8\!:\!00$ pm until it is done, at what time do they finish?

[4 marks]