FUNCTIONAL SKILLS MATHEMATICS

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

Entry Level 3

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

[1 mark]

2(b)   56 days in weeks

[1 mark]

2(c)   12 months in years

[1 mark]

2(d)   2 weeks in days

[1 mark]

2(e)   3 years in months

[1 mark]

2(f)   4 hr in minutes

[1 mark]

2(g)   28 min in seconds

[1 mark]

2(h)   3600 s in hours

[1 mark]

2(i)   336 hr in weeks

[1 mark]

2(j)   3 weeks in hours

[1 mark]

10

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

3(a)   3 : 45 am

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

3(b)   3 : 45 pm

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

3(c)   11 : 15 am

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

3(d)   8 : 20 pm

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

3(e)   4 : 45 pm

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

3(f)   5 : 25 am

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

3(g)   12 : 40 pm

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

3(h)   12 : 10 am

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

3(i)   2 : 30 pm

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

3(j)   9 : 50 pm

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

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]

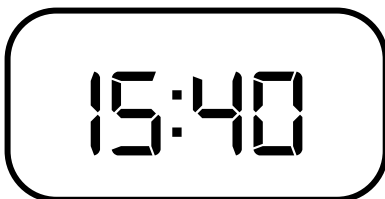**Q5** State the times shown on these digital clocks. Give your answers in 12 hour time.

5(a)

    21:00

[1 mark]

5(b)

    11:45

[1 mark]

5(c)

    04:00

[1 mark]

5(d)

    15:40

[1 mark]

5(e)

    00:55

[1 mark]

Q6   State the times shown on these analogue clocks.

6(a)

[1 mark]

6(b)

[1 mark]

6(c)

[1 mark]

6(d)

[1 mark]

4

Turn over ►

Q7   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 at Barcelona airport	11:25
Bus to the resort leaves	12:15
Arrive at the resort	13:30

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

[2 marks]

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

[2 marks]

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

[2 marks]

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

[2 marks]

Turn over ▶

Q8   Eleanor has a number of important meetings to go to, starting at 09:00 am.

8(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]

8(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]

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

[2 marks]

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

[2 marks]

8(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]

Q9   The diagram shows a timetable for the Central Line on the London Underground.

Marble Arch	0901	0912	0923	0934	0945	0956
Bond Street	0903	0914	0925	0936	0947	0958
Oxford Circus	0904	0915	0926	0937	0948	0959
Tottenham Court Road	0905	0916	0927	0938	0949	1000
Holborn	0907	0918	0929	0940	0951	1002
Chancery Lane	0909	0920	0931	0942	0953	1004
St Paul's	0912	0923	0934	0945	0956	1007
Bank	0913	0924	0935	0946	0957	1008
Liverpool Street	0916	0927	0938	0949	1000	1011

9(a)   How frequently do trains leave Marble Arch?

[2 marks]

9(b)   How long does it take to get from Oxford Circus to Liverpool Street?

[2 marks]

9(c)   Andy gets on a train at Bond Street. If he wishes to meet a friend at Bank by 0950, and spend the least time waiting for his friend as possible, which train should he get?

[2 marks]

9(d)   There is a 5 minute delay at Holborn on Andy's train. Can he still get to Bank by 0950?

[2 marks]

Q10 This is the timetable of a weekend conference on technology.

	$09:00 - 11:00$	$11:15 - 13:15$	$14:30 - 16:30$
Friday	Welcome and Introductions	Britain's Internet Hardware: The Next Big Crisis?	Tomorrow's World: Tech on the TV
Saturday	How we Use our Screens	Keynote: The Myth of Getting Rich Quick – from a Silicon Valley Insider	White Hat Hackers: A Discussion of Ethics
Sunday	Technology and the Law	Is DCMS up to Speed on Tech?	Thank you for Attending and Goodbye

10(a) Every session lasts the same amount of time. How long is that?

[2 marks]

10(b) Annie attends "How we Use our Screens" and "White Hat Hackers: A Discussion of Ethics". How much time does she have between these sessions?

[2 marks]

10(c) Can Annie attend "Technology and the Law" and "Is DCMS up to Speed on Tech?" if it takes 20 minutes to go between them.

[2 marks]

10(d) Annie attends five sessions overall. How long did she spend in conference sessions?

[2 marks]

8

Turn over ▶

Q11   This is a calendar which shows the cost of train tickets from Harrogate to London in January 2022.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
					1 £99	2 £99
3 £74	4 £74	5 £48	6 £59	7 £89	8 £99	9 £99
10 £49	11 £69	12 £59	13 £59	14 £79	15 £94	16 £94
17 £68	18 £72	19 £59	20 £49	21 £78	22 £99	23 £94
24 £59	25 £49	26 £64	27 £74	28 £89	29 £94	30 £99
31 £84						

11(a)   What is the cheapest day to travel from Harrogate to London?

[1 mark]

11(b)   Toni wants to travel to London on a Thursday. She wants to travel for the least money possible. Which day should she choose?

[1 mark]

11(c)   Toni wants to travel back on the Saturday after she leaves. Given that prices from London to Harrogate are the same as prices from Harrogate to London, should she still choose to travel on the day you selected in part (b)?

[3 marks]

11(d)   Under the Delay Repay scheme, if a train is $15 - 30$ minutes late, you are eligible for 50% of the value of the train ticket in compensation, and if it is more than 30 minutes late, you are eligible for 100% of the value of the train ticket in compensation. Using the dates you picked in part (c), find how much compensation Toni is entitled to if her train out is 20 minutes delayed and her train back is 40 minutes delayed.

[3 marks]