

Name: _____

GCSE Maths Practice Paper
CCEA Unit M5
Set A
Paper 2 Calculator



Equipment

1. A black ink ball-point pen.
2. A pencil.
3. An eraser.
4. A ruler.
5. A pair of compasses.
6. A protractor.
7. A calculator

Guidance

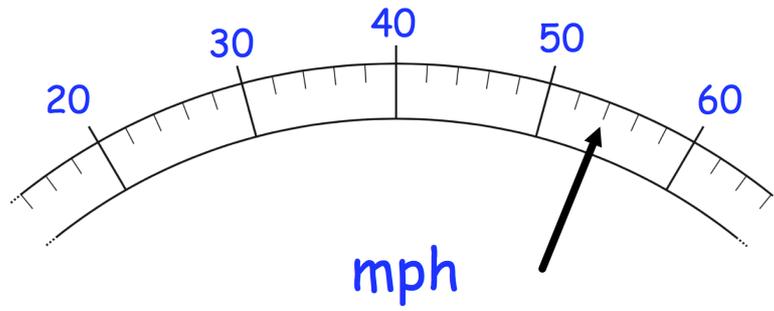
1. Read each question carefully.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Information

1. Time: 1 hour 45 minutes
2. The maximum mark for this paper is 100.
3. The marks for questions are shown in brackets
4. You may use tracing paper.

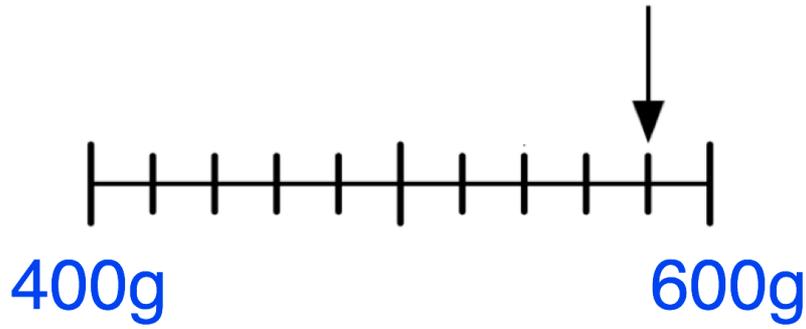
Question	Mark	Available
1		2
2		2
3		2
4		3
5		2
6		2
7		4
8		3
9		4
10		4
11		3
12		4
13		3
14		2
15		4
16		3
17		3
Total		50

1.



(a) What speed is shown?

.....
(1)



(b) Jack says that the arrow is pointing to 590g

Explain why he is wrong

.....
.....
.....

(1)

2. Belfast became a city in 1888
Newry became a city in 2002

(a) How many years after Belfast becoming a city, did Newry become a city?

.....
(1)

In 2019, the population of the city of Belfast was 343,542

(b) Write down the value of the digit 4 in 343,542

.....
(1)

-
3. Here are the first four terms of a number sequence.

11 15 19 23

(a) Write down the next term of the number sequence.

.....
(1)

The 100th term of the number sequence is 407.

(b) Work out the 99th term of the number sequence.

.....
(1)

4.

Castleton
x

Leek x

x Donhampton

Milton x

x Sandcliff



1cm represents 10km

(a) What is the compass direction of Donhampton from Leek?

.....
(1)

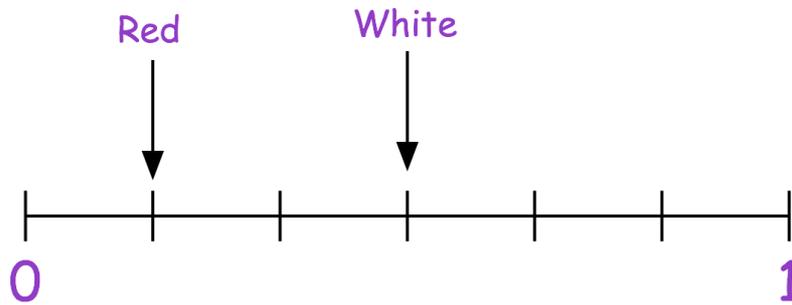
(b) What is the compass direction of Sandcliff from Leek?

.....
(1)

(c) What is the actual distance between Milton and Sandcliff?

.....km
(1)

5. Reggie has a bag holding red, white and green counters. Altogether there are 6 counters in the bag.



The probability scale shows the probability that a counter picked at random will be white.

It also shows the probability that a counter picked at random will be white.

- (a) Show on the probability scale the probability that a counter picked at random will be yellow.

(1)

- (b) Show on the probability scale the probability that a counter picked at random will be green.

(1)

6. Caoimhe is driving through Spain and sees the sign below.



This is the speed limit in kilometres per hour.

What is the speed limit in miles per hour?

.....miles per hour
(2)

7. Here are four cards.
Each card has a number on it.

8

4

9

2

Write down all the 3-digit **odd** numbers that can be made using the cards.

.....
.....
.....

(4)

8. There are 20 counters in a bag.

2 of the counters are white.

1 of the counters is pink.

4 of the counters are black.

The rest of the counters are purple.

Carter takes a counter at random from the bag.

Find the probability that the counter is purple.

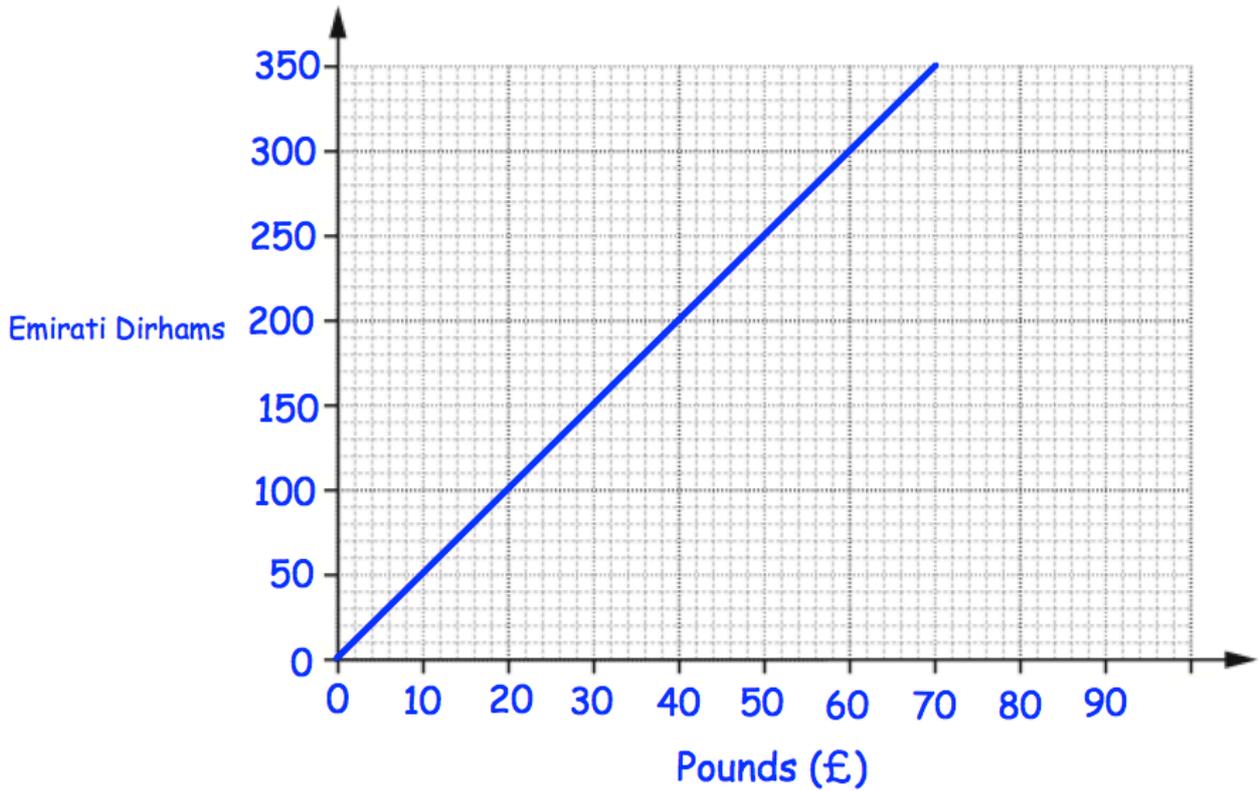
.....
(3)

9. Chloe bought 2 litres of lemonade for £1.50
She sells 250ml glasses of lemonade for 40p each.
Chloe sells all the lemonade.

Work out her profit

.....
(4)

10.



(a) Convert £50 into Dirhams.

.....Dirhams
(1)

(b) Convert 175 Dirhams into Pounds (£).

£.....
(1)

Tom wants to buy a camera.
In London the camera costs £380.
In Abu Dhabi the camera costs 2000 Dirhams.

In which city is the camera cheaper and by how much?
Give your answer in pounds.

City:..... £.....
(2)

11. Here are some patterns made from dots.



Pattern 1



Pattern 2



Pattern 3

(a) Complete the table for Pattern 4.

Pattern Number	1	2	3	4
Number of dots	3	5	7	

(1)

Harry wants to find the number of dots in Pattern number 50.

(b) Write down a method he could use.

.....

.....

(1)

Dots are used to make a different sequence of patterns.
The first three patterns are shown.



Pattern 1



Pattern 2



Pattern 3

(c) How many dots are needed to make Pattern 6?

.....

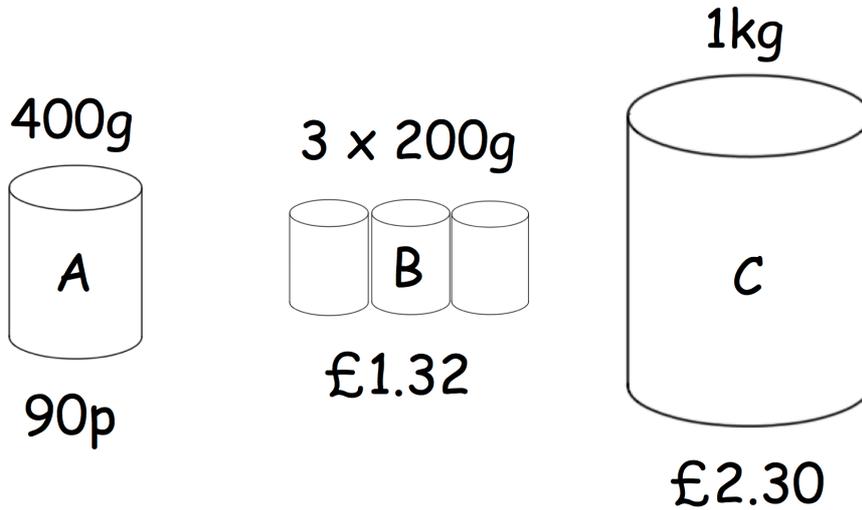
(1)

12. A shop sells baked beans in three different sizes.

Option A: 400g tin for 90p

Option B: 3 x 200g pack for £1.32

Option C: 1kg large tin for £2.30



Which is the best value for money?

.....
(4)

13. James has received two job offers.

A job in Milan which pays €49,980 a year.

A job in Boston which pays \$54,400 a year.

The exchange rates were £1 = \$1.28 and £1 = €1.19

Which job offer has the highest salary?

You must show your working.

.....
(3)

14.



This sign is correct to the nearest hundred.

(a) What is the lowest possible number of people that live in Ballycastle?

.....
(1)

(b) What is the greatest possible number of people that live in Ballycastle?

.....
(1)

15. Charlotte and Melissa booked theatre tickets costing £180.

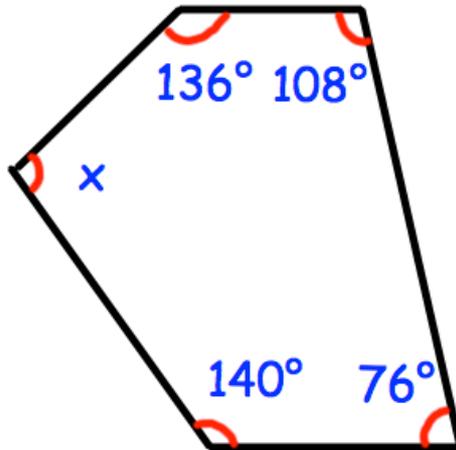
They have a voucher that entitles them to 20% off the total price.

Charlotte and Melissa share the total cost of the tickets in the ratio 5:7.

Work out how much more Melissa pays than Charlotte.

.....
(4)

16. Shown below is a pentagon.



Work out the size of angle x.

.....^o
(3)

17. Mrs Jenkins is organising a charity raffle.

She sells 3200 tickets for £3 each.

The probability that someone wins a prize is 0.07

Each prize cost £13

The profit is donated to charity.

Work out how much money Mrs Jenkins donates to charity.

£.....
(3)