Edexcel GCSE Maths Foundation

Paper 1 November 2023

Non-Calculator

First Half

43 Marks

Past Paper
Website
Home

www.elevise.co.uk

Answer ALL questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

QE1A

1 Here is a list of numbers.

2 4 4 7 8

Work out the range of these numbers.

....

(Total for Question 1 is 1 mark)

QE2A

2 Work out $120 - 89$

....

(Total for Question 2 is 1 mark)

QE3A

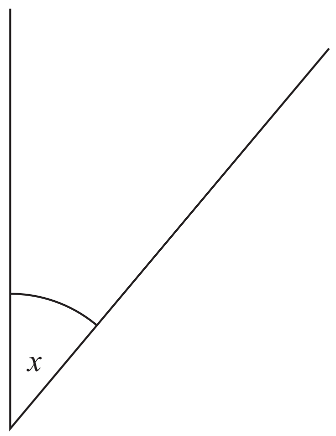
3 Simplify $3 \times a \times 4$

....

(Total for Question 3 is 1 mark)

QE4A

4 Measure the size of the angle marked x.



....°

(Total for Question 4 is 1 mark)

QE5A

5 Work out $\frac{1}{5}$ of 300

....

(Total for Question 5 is 1 mark)

6 There are 3 litres of oil in a can.
Jermaine uses 700 millilitres of the oil.

Work out the amount of oil left in the can.
Give your answer in millilitres.

QE6A

.... millilitres

(Total for Question 6 is 3 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

7 Matt is drawing a scale diagram.

1 cm represents 5 m.

He draws a line 3 cm long.

(a) What real distance does the line represent?

.... m

(1)

The real distance between two points is 20 m.

(b) What is the distance between the two points on the scale diagram?

.... cm

(1)

(Total for Question 7 is 2 marks)

8 Miss Bailey asked 24 students where they each wanted to go on a school trip.

Here are the results.

museum	castle	castle	farm
farm	castle	farm	farm
castle	farm	castle	castle
castle	farm	castle	museum
museum	farm	castle	museum
museum	museum	castle	castle

(a) Complete the frequency table.

Place	Tally	Frequency
castle		
farm		
museum		

(2)

(b) Write down the place that is the mode.

....

(1)

QE8A

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

(c) Draw a bar chart to show the results.

(3)

(Total for Question 8 is 6 marks)

QE9A

9 Selina has a bag of 22 counters.

5 of the counters are blue.
9 of the counters are red.
8 of the counters are pink.

Selina takes at random a counter from the bag.

Write down the probability that Selina

(i) takes a red counter,

....
(1)

(ii) does **not** take a pink counter,

....
(1)

(iii) takes a white counter.

....
(1)

(Total for Question 9 is 3 marks)

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DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

QE10A

10 Here are the ingredients needed to make 20 peanut butter cookies.

Makes 20 cookies
250 g peanut butter 200 g sugar 2 small eggs

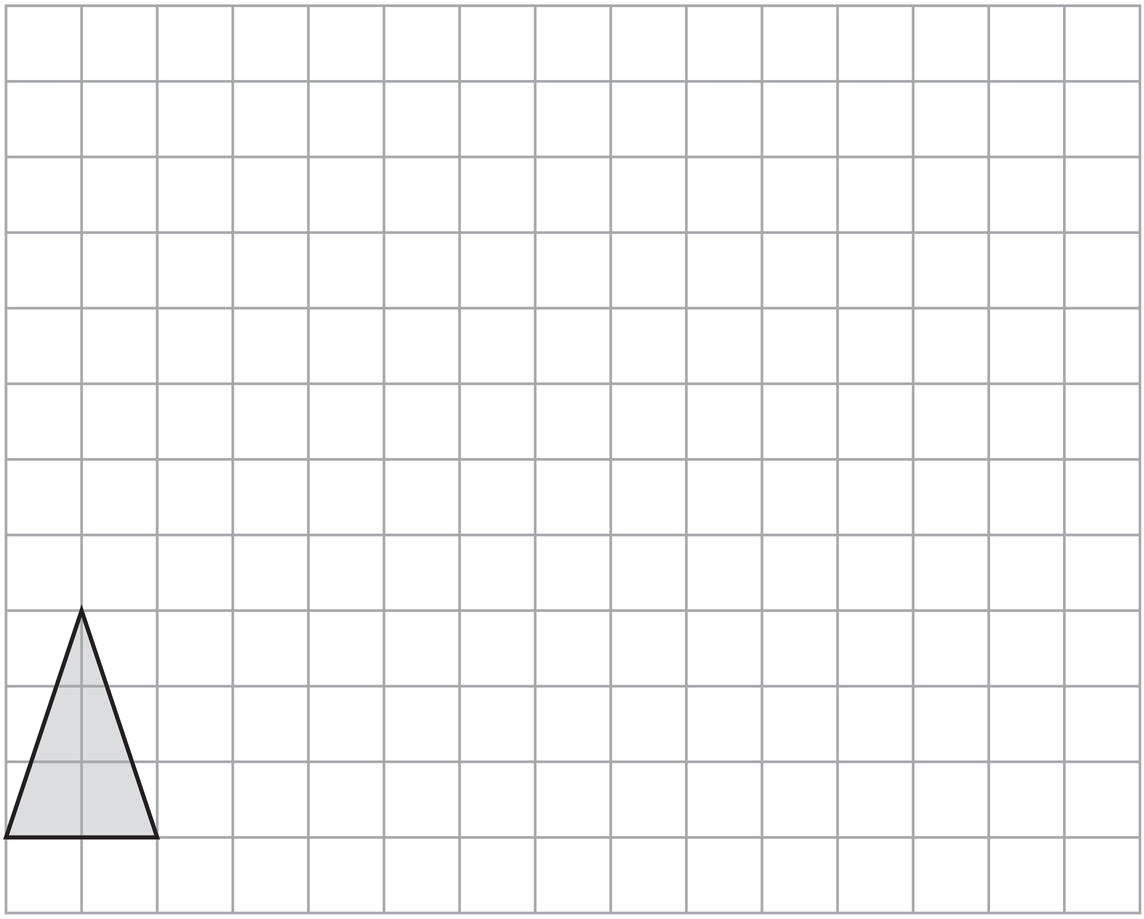
Derek wants to make 60 cookies.

He has 900 g of peanut butter.

Does Derek have enough peanut butter to make 60 cookies?
You must show how you get your answer.

(Total for Question 10 is 3 marks)

11



On the grid, draw an enlargement of the triangle with a scale factor of 3

QE11A

(Total for Question 11 is 2 marks)

12 $P = 2g + 4h$

(a) (i) Work out the value of P when $g = 3$ and $h = 5$

QE12A

$P =$ ....

(2)

(ii) Work out the value of g when $P = 38$ and $h = 3$

$g =$ ....

(2)

$V = 3r - q$

(b) Work out the value of V when $r = -3$ and $q = 2$

$V =$ ....

(2)

(Total for Question 12 is 6 marks)

QE13A

13 Chloe is making scrunchies.

Chloe has a large number of hair bands.
Each hair band costs 8p.

She buys 100 g of wool for £3

Chloe uses 1 hair band and 5 g of wool to make each scrunchy.
She makes as many scrunchies as she can.

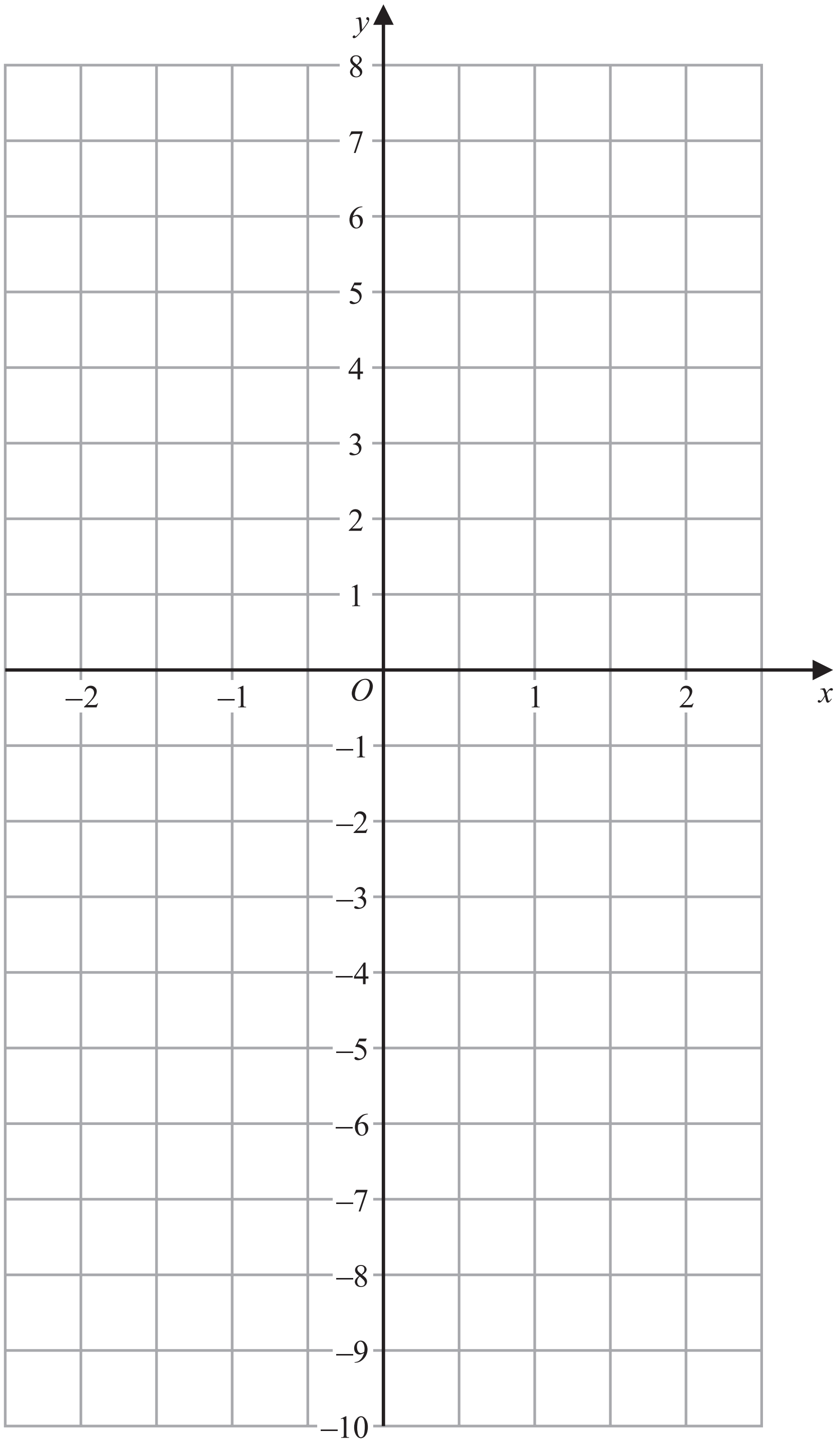
Work out the total cost of each scrunchy that she makes.
Give your answer in pence.

....p

(Total for Question 13 is 4 marks)

QE14A

14 On the grid, draw the graph of $y = 4x - 1$ for values of x from –2 to 2



(Total for Question 14 is 3 marks)

P 6 9 5 2 5 A 0 1 3 2 4

15 Steve is buying a car.
The car costs £12 000

Steve pays 25% of the cost as a deposit.
He pays the rest of the cost in 20 equal monthly payments.

How much is each monthly payment?

QE15A

£...

(Total for Question 15 is 4 marks)

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16 Shah takes an exam.
The exam is out of 60 marks.

Shah needs to score at least 70% of the marks to pass the exam.
He scores 45 marks.

Show that Shah passes the exam.

QE16A

(Total for Question 16 is 2 marks)

Foundation Tier Formulae Sheet

Perimeter, area and volume

Where a and b are the lengths of the parallel sides and h is their perpendicular separation:

Area of a trapezium = $\frac{1}{2}(a + b)\,h$

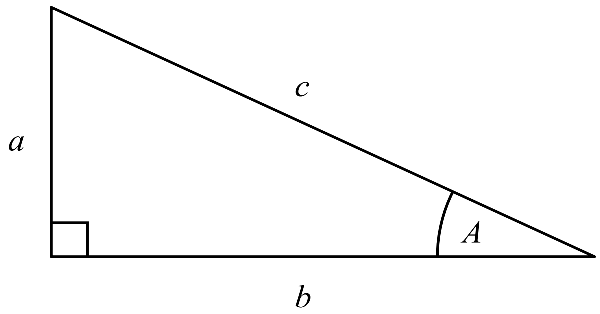
Volume of a prism = area of cross section × length

Where r is the radius and d is the diameter:

Circumference of a circle = $2\pi r = \pi d$

Area of a circle = πr^2

Pythagoras' Theorem and Trigonometry



In any right-angled triangle where a, b and c are the length of the sides and c is the hypotenuse:

$$a^2 + b^2 = c^2$$

In any right-angled triangle ABC where a, b and c are the length of the sides and c is the hypotenuse:

$$\sin A = \frac{a}{c} \quad \cos A = \frac{b}{c} \quad \tan A = \frac{a}{b}$$

Compound Interest

Where P is the principal amount, r is the interest rate over a given period and n is number of times that the interest is compounded:

Total accrued = $P\left(1 + \frac{r}{100}\right)^n$

Probability

Where P (A) is the probability of outcome A and P (B) is the probability of outcome B:

P (A or B) = P (A) + P (B) – P (A and B)

END OF EXAM AID