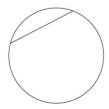
Maths with Melissa

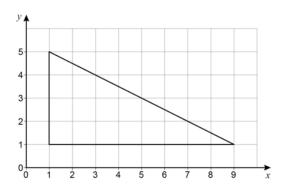
AQA GCSE Mathematics Calculator 2023 Foundation Paper 3 Revision Worksheet

Questions 1-13

- 1. Work out 10% of 170.
- 2. Write down the value of the digit 7 in 34,728.
- 3. a) Write down the name of a triangle with three equal sides.
- b) Write down the name for the straight line inside this circle.



- 4. Write down all the factors of 45.
- 5. a) The formula is $d = g^2 2h$. Work out the value of d when g = 15 and h = 63.
- b) Rearrange m = n + k to make n the subject.
- 6. Here is a right-angled triangle on a centimetre grid:

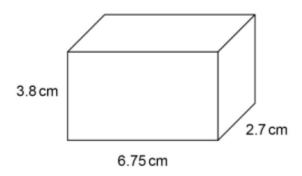


[Image: A right-angled triangle drawn on a 1 cm grid, with vertices at (0,0), (8,0), and (8,5)]

- a) Write down the coordinates of the midpoint of the longest side.
- b) Work out the area of the triangle.
- 7. The total cost of broadband for 5 months is £99. At the same monthly rate, work out the total cost of broadband for **2 years**.

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8. Here is a cuboid:



Work out the volume of the cuboid. Give your answer to 1 decimal place.

9. Nicki asked 30 people to name their favourite crisp flavour. Here are the results:

Salt and Vinegar: 16

• Ready Salted: 7

• Cheese and Onion: 5

• Prawn Cocktail: 2

Nicki drew a pictogram to represent the results.

Favourite crisp flavour

Salt and Vinegar	$\oplus \oplus \oplus \oplus$
Ready Salted	$\oplus \oplus$
Cheese and Onion	
Prawn Cocktail	\oplus

What two mistakes has Nicki made?

Mistake 1:

Mistake 2:

10. Sanjit buys 1.75 kg of potatoes and 4 kg of leeks. The total cost is £9.

The potatoes cost 84p per kg. Work out the cost per kg of the leeks.

Maths with Melissa

11. (a) Simplify fully:
$$2x + 9y + 1 + 8x - 5y - 7$$

b) Circle the expression that is equivalent to $0.5a^2$:

a)
$$a^2$$
 b) $\frac{a}{2}$ c) $\frac{a^2}{2}$ d) $\frac{a^2}{4}$

12. Here are the subjects available in year 12 at a school.

Students choose three subjects. They cannot choose more than one subject from a block.

Block 1	Block 2	Block 3	Block 4
Maths (M)	Geography (G)	English (E)	Spanish (S)
History (H)	Drama (D)	Physics (P)	Biology (B)
French (F)	Chemistry (C)	ICT (I)	Art (A)

Lian decides:

- to study Maths
- not to study Geography, Chemistry, Physics or ICT

By listing, show that there are seven groups of three subjects that Lian could choose.

Subject 1	Subject 2	Subject 3

- 13. There are 1400 students at a college. A student is chosen at random.
- a) The probability that the student is taking a GCSE resit is 0.9 How many of the students are taking a GCSE resit?
- b) The probability that the student is studying A-levels is 0.67, and Core Maths is 0.48. Show that some students are studying both A-levels and Core Maths.