

AQA GCSE Mathematics Calculator 2023 Foundation Paper 3 Revision Worksheet

Questions 1–10

1. Solve the following equations:

(a) Solve $5x = 15$

$x =$

(b) Solve $y + 7 = 50$

$y =$

(c) Solve $\frac{c}{4} = 8$

$c =$

2. Here is a list of numbers: 10, 8, 2, 11, 12, 15, 4, 4

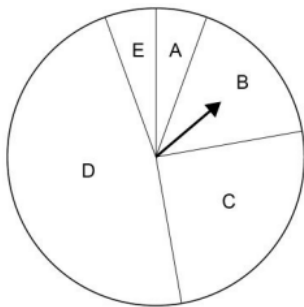
(a) Write down the mode.

(b) Work out the median.

(c) Work out the range.

3. Probability and Spinners

(a) A fair spinner with five sections is spun.

**Complete these statements:**

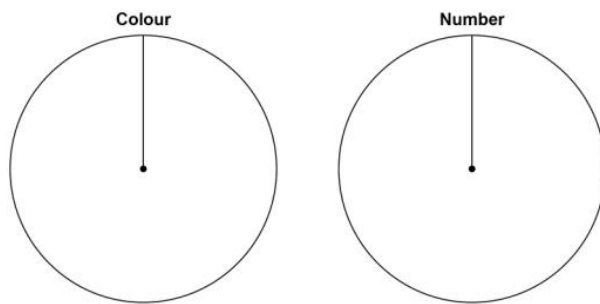
The spinner is most likely to land on section

The spinner is equally likely to land on sections _____ and _____

(b) Two different spinners are spun. One spinner has sections labelled with colours. The other spinner has sections labelled with numbers. Here is a list of all the possible outcomes:

Red 1	Red 2	Red 3	Red 4
Blue 1	Blue 2	Blue 3	Blue 4
Green 1	Green 2	Green 3	Green 4

Show the possible sections on the two spinners.



4. Ribbon Problem

A reel holds 9.5 metres of ribbon. Two pieces of ribbon are cut from the reel. Each piece is 20 centimetres long. **What length of ribbon is left on the reel? State the units of your answer.**

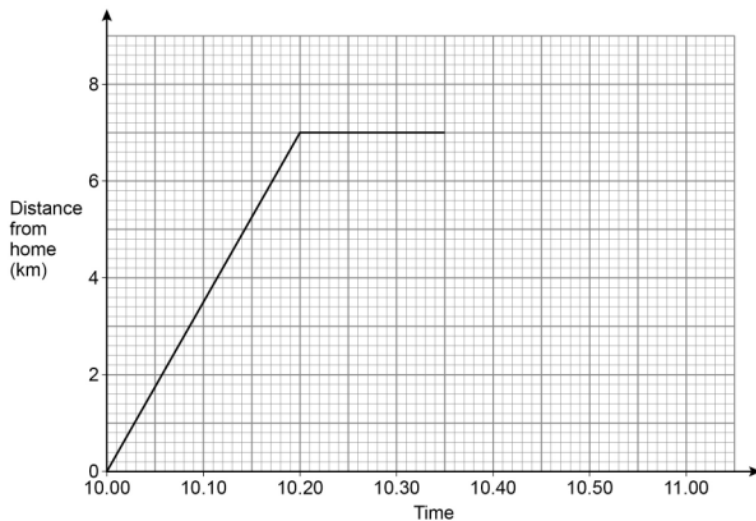
5. Sequences

(a) The term-to-term rule for a sequence is: subtract 1 then multiply by 5. The 1st term is 4. **Work out the 3rd term.**

(b) The term-to-term rule for a different sequence is: add 20 then divide by 2. The 2nd term is 50. **Work out the 1st term.**

6. Distance-Time Graph

Scarlett leaves home at 10:00 to cycle to the supermarket. Here is part of a distance-time graph of her trip to the supermarket.



- (a) She arrives at the supermarket at 10:20. How far is the supermarket from her home?
- (b) She leaves the supermarket at 10:35. How long does she stay at the supermarket?
- (c) Scarlett cycles home at a constant speed using the same route. It takes her 3 minutes longer than her journey to the supermarket. **Complete the distance-time graph.**

7. Liam's Pay

This week, Liam works 25 hours at £10.20 per hour and extra hours at the weekend at £11.80 per hour. Here are the extra hours he works at the weekend:

Saturday: 7 am to 10 am

Sunday: 1 pm to 3 pm

In total, how much is he paid this week?

8. Mass of Oranges

Three oranges have masses of 60 g, 70 g and 85 g.

Show that their total mass is between $\frac{1}{5}$ and $\frac{1}{4}$ of a kilogram.

9. Always, Sometimes, Never True

For each statement, tick the correct box.

Statement	Always true	Sometimes true	Never true
One of the three angles of a triangle is 90°			
One of the three angles of a triangle is obtuse			
One of the three angles of a triangle is reflex			

10. Simplifying Algebra

(a) Simplify fully: $p^2 \times p$

(b) Simplify fully: $3a + 5c - a + 6c$
