

Year 6 SATs – Problem Solving Maths Questions

1. Zane has 5 blue jumpers, 3 green jumpers and 2 red jumpers.

What fraction of his jumpers are **red**?

1 mark

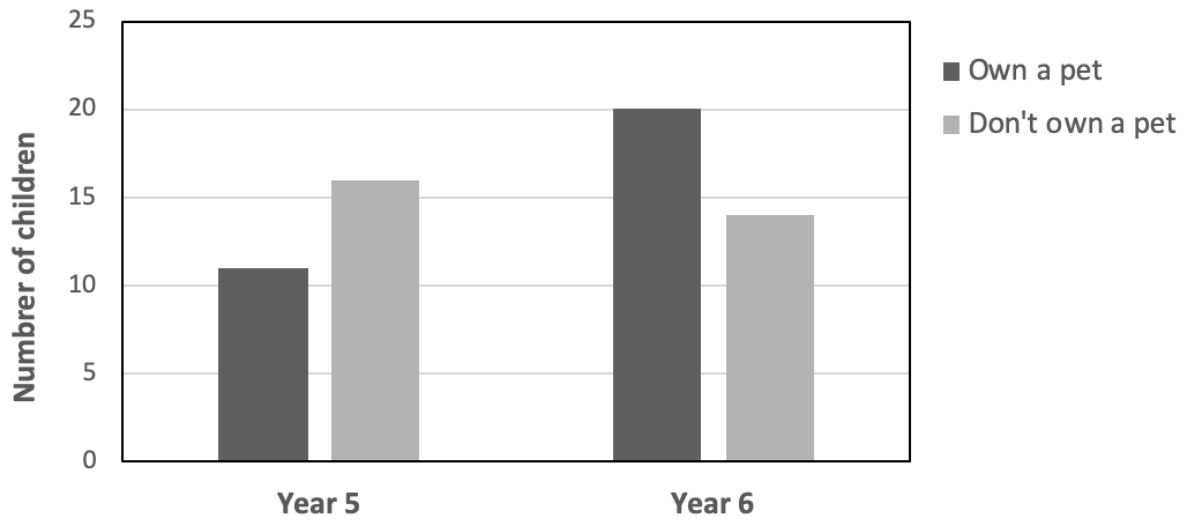
2. Christina is saving to buy a toy, which costs £19.99.

She has already saved £8.61.

How much more money does Christina need to save so that she can buy the toy?

1 mark

3. The bar chart below shows how many children in Year 5 and Year 6 own a pet.



Altogether, how many children don't own a pet?

1 mark

How many more Year 6 children than Year 5 children own a pet?

1 mark

4. Amira runs 965 metres, then walks 550 metres. She then sprints for 150 metres.

How many metres does Amira cover in total?

 m

1 mark

5. A class has 30 children.

Two-fifths of the children come to school by bus and one-fifth of the children cycle. The rest of them walk to school.

How many children walk to school?

Show your method



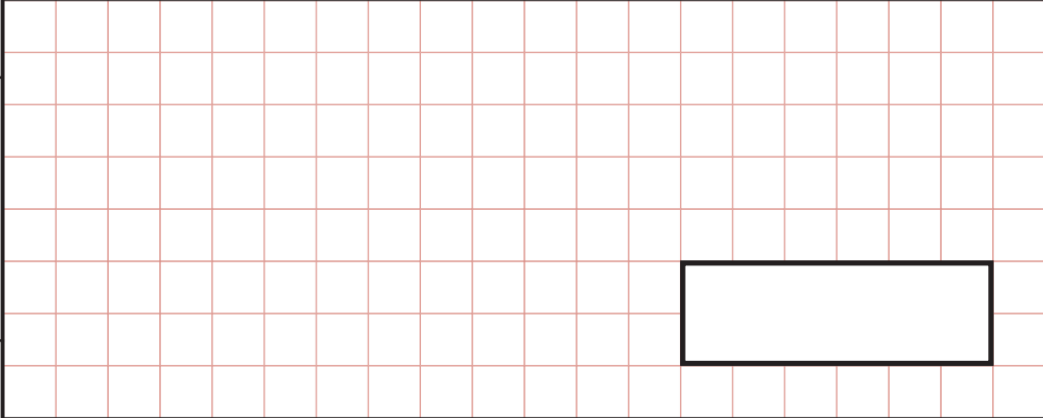
2 marks

6. A box has 150 oranges in it.

12 children eat 11 oranges each over the course of a week.

How many oranges are left in the basket?

Show your method



2 marks

7. Three decimal numbers add together to equal 2.8.

One of the numbers is 0.7, another one is 1.2.

What is the third number?



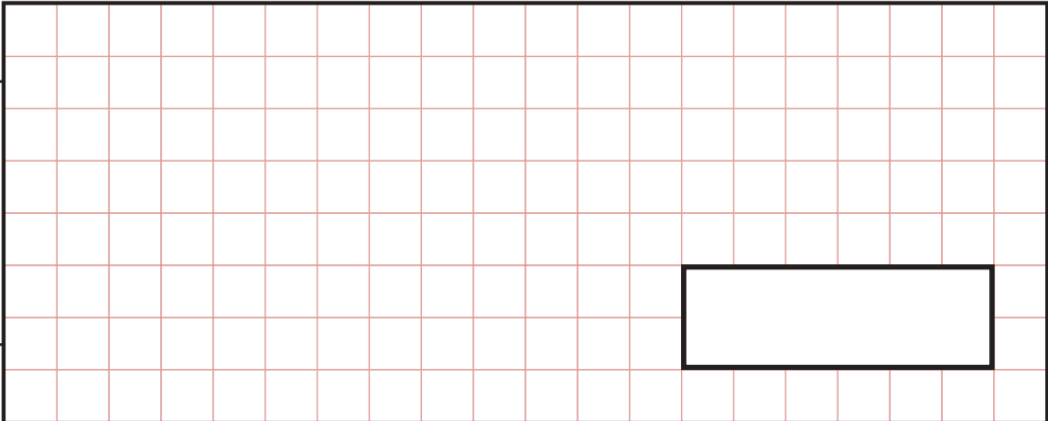
1 mark

8. Tom raises £210 from a sponsored swim.

Each person sponsored him £15.

How many people sponsored him in total?

Show your method



2 marks

9. Circle the cheapest pair of trainers.



2 marks

12. Bruno and Samira both bake a loaf of bread.

Bruno's loaf weighs 400g.

Samira's loaf weighs 2 times more than Bruno's.

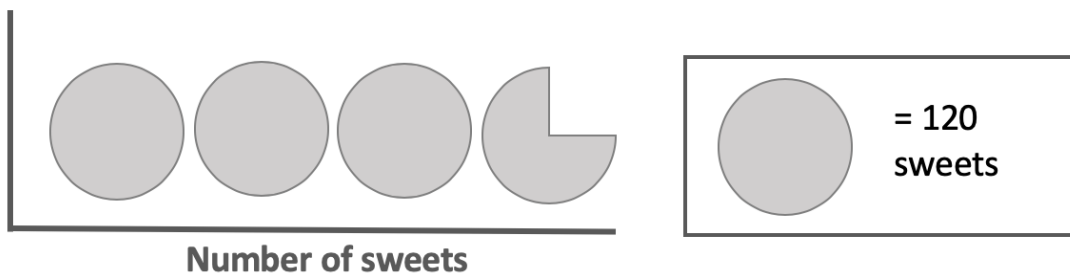
What is the **total** weight of both loaves? Give your answer in kilograms.

Show your method

kg

2 marks

13. This pictogram shows the number of sweets in a sweet jar.



How many sweets are in the sweet jar?

2 marks

14. Sofia is given some money to buy her lunch.

She spends £1 on a drink.

She spends £2.69 on a sandwich.

She spends £1.81 on a flapjack.

She has half of her money left.

How much money did Sofia have **to start with**?

Show your method

£

2 marks

17. Dante asked 50 adults what their favourite flower is.

These were his results.

Flower	Number of adults
Lilies	7
Roses	20
Daffodils	6
Orchids	3
Sunflowers	10
Tulips	4
Total	50

What percentage of the adults chose roses?

%

1 mark

18. A shop sells a pack containing 4 bottles of water for £3.25.

The shop also sells individual bottles of water for 85p.



£3.25



85p

Maya buys 4 individual bottles of water. Theo buys a pack of water.

How much **more** does Maya spend than Theo?

Show your method

A large rectangular grid with a red border and a light red grid pattern. On the left side, there is a rounded rectangular box containing the text "Show your method". On the right side, there is a smaller rectangular box containing the letter "p".

2 marks

19. Priya chooses a number between 5 and 10.

She multiplies it by 12 then subtracts 12

She then divides this result by 4

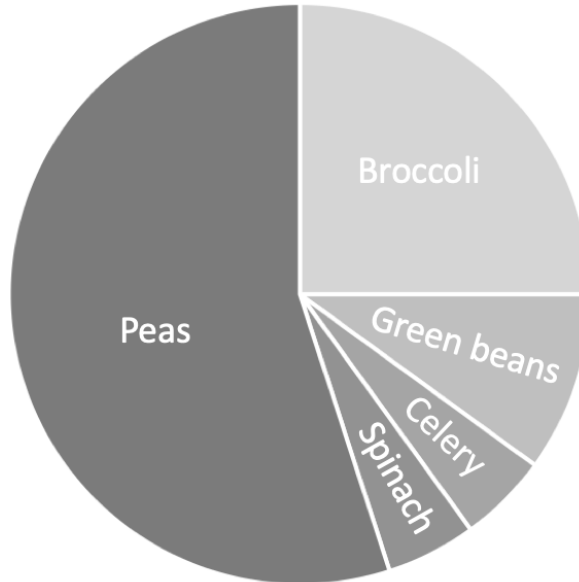
Her answer is 21

What was the number she started with?

A simple black-outlined rectangular box intended for the student to write their answer.

2 marks

20. The following pie chart shows the favourite green vegetables of children at a school.



There are 140 children in the school altogether.

How many children said their favourite vegetable is broccoli?

1 mark


90% of the children said either peas, green beans or broccoli are their favourite.

How many children **combined** said their favourite vegetable is either spinach or celery?

We hope you enjoyed this paper about problem solving.
Please visit www.yearsix.co.uk for more SATs help.

1 mark

Answers

Qu.	Requirement	Mark
1	Award ONE mark for the correct answer of 1/5. Also accept 2/10.	1m
2	£11.38	1m
3	Part A). 30 Part B). 9	Up to 2m
4	1,665	1m
5	12	Up to 2m
6	18	Up to 2m
7	0.9	1m
8	14	Up to 2m
9	Award TWO marks for the correct trainers circled. 	Up to 2m
10	£4.55	Up to 2m
11	25	Up to 2m
12	1.2kg	Up to 2m
13	450	Up to 2m
14	£11	Up to 2m

Qu.	Requirement	Mark
15	25%	1m
16	£144	Up to 2m
17	40%	1m
18	15p	Up to 2m
19	8	Up to 2m
20	Part A). 35 Part B). 14	Up to 2m