Mathematics

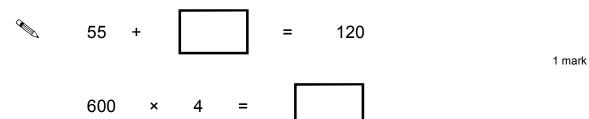
Test A

2003

40 min 40 marks

Calculator Not Allowed

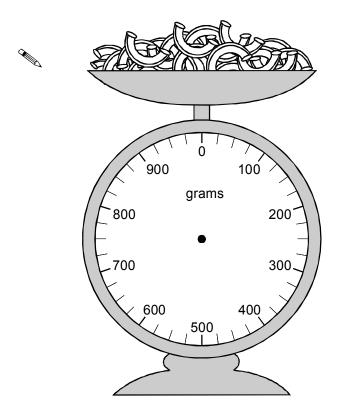
1. Write in the missing numbers.



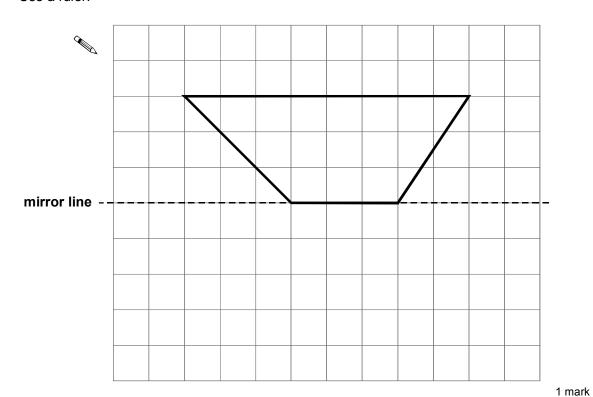
2. Jamie is cooking pasta.

He weighs 350 grams of pasta.

Draw an arrow on the scale to show 350 grams.



Complete the diagram below to make a shape that is symmetrical about the mirror line.Use a ruler.



4. Which of these numbers give 80 when rounded to the nearest 10?
Circle all the correct numbers.

84 87 72 76 90

1 mark

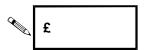
5. Calculate **309 –198**



6. This table shows how many journeys a taxi driver made on five days and how much money he collected.

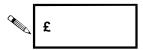
| | number of journeys | money collected |
|-----------|-----------------------|--------------------|
| Monday | 23 | £85 |
| Tuesday | 36 | £112 |
| Wednesday | 18 | £69 |
| Thursday | 31 | £124 |
| Friday | 35 | £109 |

How much money did he collect on the day that he made the most journeys?



1 mark

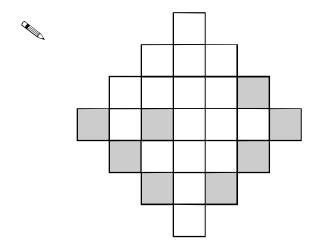
How much more money did he collect on Monday than on Wednesday?



1 mark

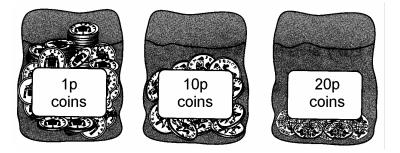
7. Here is a grid with eight squares shaded in.

Shade in two more squares to make a symmetrical pattern.



8. Each of these bags contains £1.60

Each bag contains only one type of coin.



Complete this table to show how many coins are in each bag.

One has been done for you.



| Type of coin | Number of coins |
|--------------|-----------------|
| 1р | 160 |
| 10p | |
| 20p | |

1 mark

9.



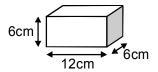
Tom and Nadia have 16 cards each.

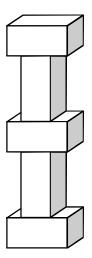
Tom gives Nadia 12 of his cards.

| | How many cards do Tom and Nadia each have now? | |
|-----|--|--------|
| | Tom Nadia | 1 mark |
| | Lucy also has 16 cards. | |
| | She gives a quarter of her cards to Kiran. | |
| | How many cards does Lucy give to Kiran? | |
| | | 1 mark |
| 10. | Here is a repeating pattern of shapes. | |
| | Each shape is numbered. | |
| < | 1 2 3 4 5 6 7 8 9 10 | |
| | The pattern continues in the same way. | |
| | Write the numbers of the next two stars in the pattern. | |
| | and | 1 mark |
| | Complete this sentence. | |
| | Shape number 35 will be a circle because | |
| | | |
| | | |
| | | 1 mark |

11. Martin has some bricks.

They are 12cm long, 6cm high and 6cm deep.





He builds this tower with **five** bricks.

How tall is the tower?



1 mark

Each brick is 12cm long.

Martin makes a line of bricks 132cm long.



How many bricks does he use?



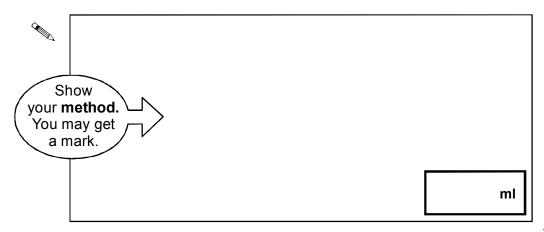


A bottle holds 1 litre of lemonade.

Rachel fills 5 glasses with lemonade.

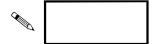
She puts 150 millilitres in each glass.

How much lemonade is left in the bottle?



2 marks

13. Calculate 2307 × 8



14. Some children ran in two races on sports day.

Here are their times.

| | 100m race | 800m race |
|-------|--------------|----------------------|
| Elise | 15.9 seconds | 3 minutes 02 seconds |
| Jake | 19.7 seconds | 2 minutes 58 seconds |
| Teri | 16.8 seconds | 3 minutes 01 seconds |
| Neil | 17.1 seconds | 2 minutes 59 seconds |
| Barry | 18.4 seconds | 2 minutes 57 seconds |

Who finished the 100m race in **second** place?

1 mark

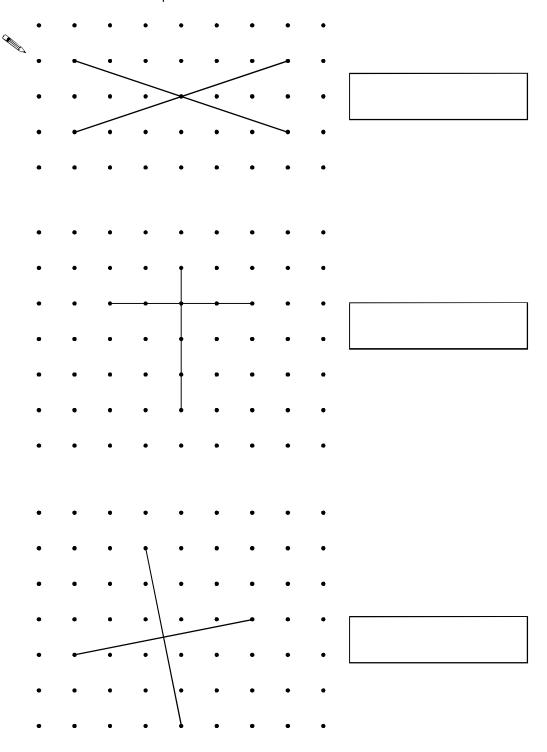
In the 800m race, how many seconds did Barry finish ahead of Elise?

seconds

1 mark

15. These diagrams show the **diagonals** of three **quadrilaterals**.

Write the names of the quadrilaterals in the boxes.



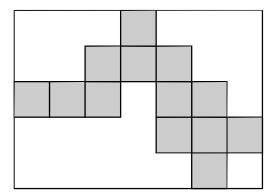
2 marks

| 7 | 5 | | 2 | 1 | | | |
|-----------|---------------|-------------|--------------|--------------|-----------------|------|---------|
| Choose | two cards e | each time | e to make t | he following | two-digit numbe | ers. | |
| The first | one is don | e for you | | | | | |
| an an | even numb | oer | | 5 | 2 | | |
| ar | multiple of 9 |) | | | | | |
| a s | square num | ber | | | | | |
| a f | actor of 96 | | | | | | 2 marks |
| | | | | | | | |
| The first | two numbe | ers in this | sequence | are 2.1 and | 1 2.2 | | |
| The seq | uence then | follows t | he rule | | | | |
| 'to get | the next n | umber, | add the t | wo previo | us numbers ' | | |
| Write in | the next tw | o numbe | rs in the se | equence. | | | |
| | 2.1 | 2.2 | 4.3 | 6.5 | | | 2 marks |
| | | | | | | | |

16. Here are four digit cards.

17.

18. Here is a rectangle with 13 identical shaded squares inside it.



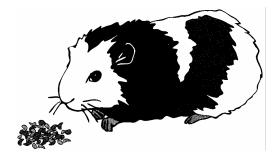
What fraction of the rectangle is shaded?



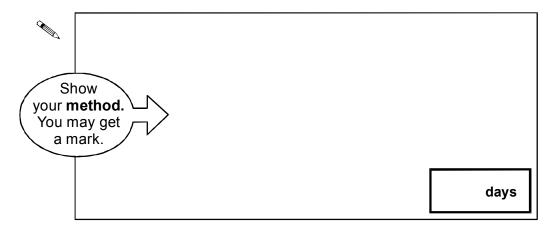
1 mark

19. A packet contains 1.5 kilograms of guinea pig food.

Remi feeds her guinea pig 30 grams of food each day.



How many days does the packet of food last?



2 marks

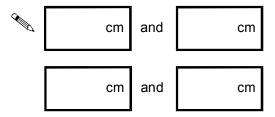
20. An isosceles triangle has a perimeter of 12cm.

One of its sides is 5cm.

What could the length of each of the other two sides be?

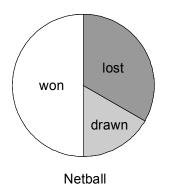
Two different answers are possible.

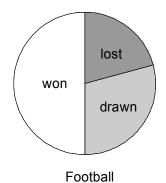
Give both answers.



2 marks

21. The pie charts show the results of a school's netball and football matches.





The netball team played **30** games.

The football team played 24 games.

Estimate the percentage of games that the netball team lost.



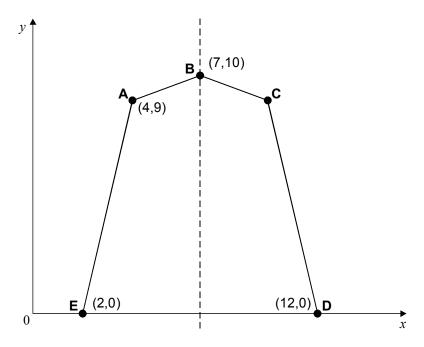
David says,

| 'The two | teams | won the | same | number | of | games' |
|----------|-------|---------|------|--------|----|--------|
|----------|-------|---------|------|--------|----|--------|

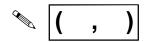
| | Is he correct? Circle Yes or No |). | | | | Yes / No | |
|-----|---------------------------------|------------|-----|---|-----|----------|--------|
| | Explain how you | know. | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | 1 mark |
| | | | | | | | |
| 22. | Write in the miss | sing numbe | er. | | | | |
| | 50 | ÷ | | = | 2.5 | | |

23. Here is a pentagon drawn on a coordinate grid.

The pentagon is symmetrical.



What are the coordinates of point **C**?



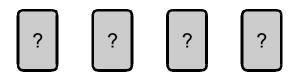
1 mark

24. Three-quarters of a number is 48

What is the number?



| 25. | Debbie has a pack of cards numbered from 1 to 20 |
|-----|--|
| | She picks four different number cards. |



Exactly three of the four numbers are multiples of 5

Exactly three of the four numbers are even numbers.

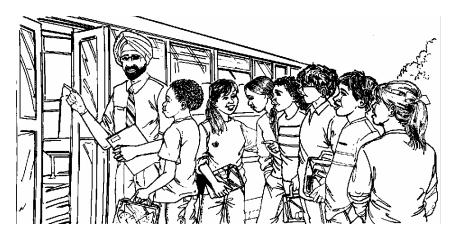
All four of the numbers add up to less than 40

Write what the numbers could be.



1 mark

26.



30 children are going on a trip.

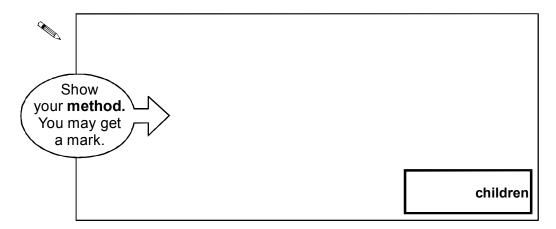
It costs £5 including lunch.

Some children take their own packed lunch.

They pay only £3

The 30 children pay a total of £110

How many children are taking their own packed lunch?



2 marks