

BENENDEN

Lower School Entrance 2018

MATHEMATICS

11+

1 Hour

Name:
School:
Date:

Equipment required: pen, pencil, ruler, protractor, compasses, eraser.
Instructions to Candidates:

- Attempt all questions. Do not worry if you don't manage to do them all
- Calculators may **not** be used
- Show ALL working
- Check your answers for accuracy
- Total points for test 90

1. The school stationery shop sells these items.

Pen	Writing Pad	Calculator	Rubber	Pencil	Ruler
15p	£1.89	£2.99	21p	13p	47p

a) Work out the total cost of a writing pad, a pen and a rubber.

.....(2)

b) What would be the cost of 8 rulers?

.....(2)

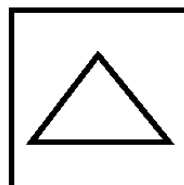
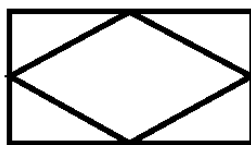
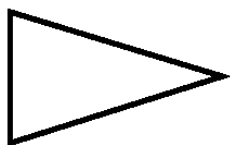
c) Jo bought 3 pens and 6 pencils. How much did she pay?

..... (2)

d) Jo paid with a £5 note. How much change did she get?

..... (2)
(Total 8 marks)

2. Draw in all the lines of symmetry on each of the following flags.



(3)

3. What is $\frac{3}{5}$ of 35? (2)

4. Work out the following. (Show your working):

a) $3256 + 467$




b) $4517 - 928$


c) 37×167

d) $12456 \div 6$

(8 marks)

5. The pictogram shows the number of packets of crisps sold by a shop on each of Monday, Tuesday and Wednesday.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Key  = 4 packets

(a) Write down the number of packets sold on Tuesday.

.....
(1)

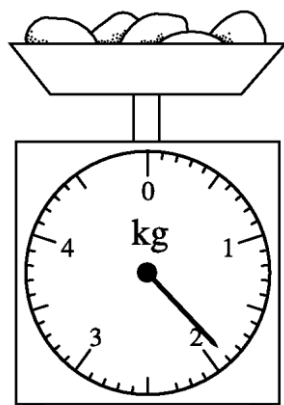
16 packets were sold on Thursday.

6 packets were sold on Friday.

(b) Use this information to complete the pictogram.

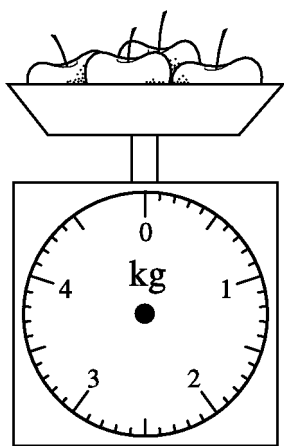
(2)
(Total 3 marks)

6. The diagram shows some potatoes on a set of scales.



(a) Write down the weight of the potatoes. (2)

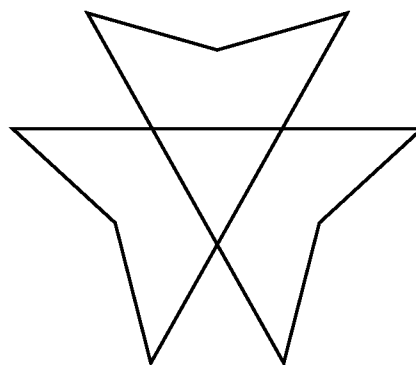
Fred buys some apples.
They weigh 3.65 kilograms.



(b) Draw a pointer showing 3.65 kilograms on the scales. (2)
(Total 4 marks)

7. On the diagram mark and label:

- i) an acute angle with a letter **A**,
- ii) a reflex angle with a letter **B**,
- iii) an obtuse angle with a letter **C**.

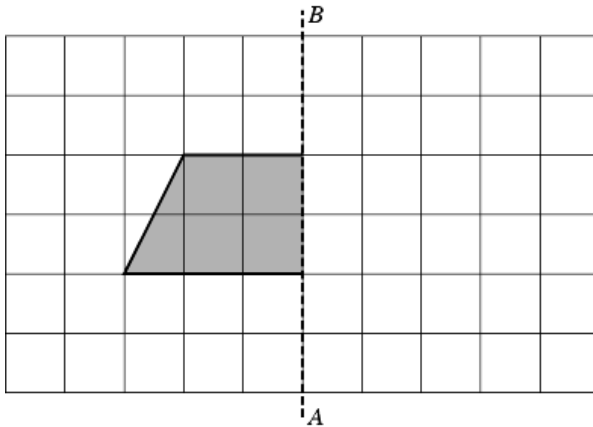


(3)

8. Using the diagram below:

(i) Reflect the shaded shape in the line AB .

(2)



(ii) Write down the mathematical name for the shape you have drawn.

.....

(2)

(Total 4 marks)

9. Which of these numbers is the smallest?
a 0.3 b 0.35
c 0.275 d 0.22

..... (2)

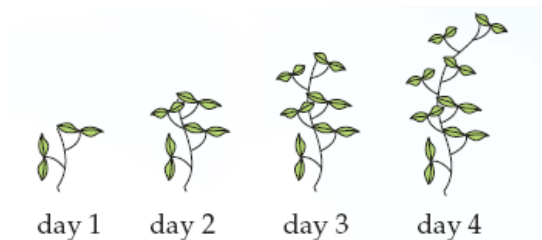
10. Here are four number cards.
Fill in the missing number in each
of these statements using one of these cards.



- a) $0.8 \times \dots = 80$ b) $4 \times \dots = 4000$ c) $40 \div 40 = \dots$ d) $570 \div \dots = 5.7$

(4)

11. Ann grew some pea seedlings. She counted the number of leaves each day.



a) Complete the table:

Day	1	2	3	4
Number of leaves	4			

(2)

b) How many leaves would you expect to see on Day 7?

(2)

(Total 4 marks)

12.

- millimetre
- centimetre
- metre
- kilometre

Choose the best unit to measure

a) The height of a cliff

b) The length of a pencil

c) The length of a river

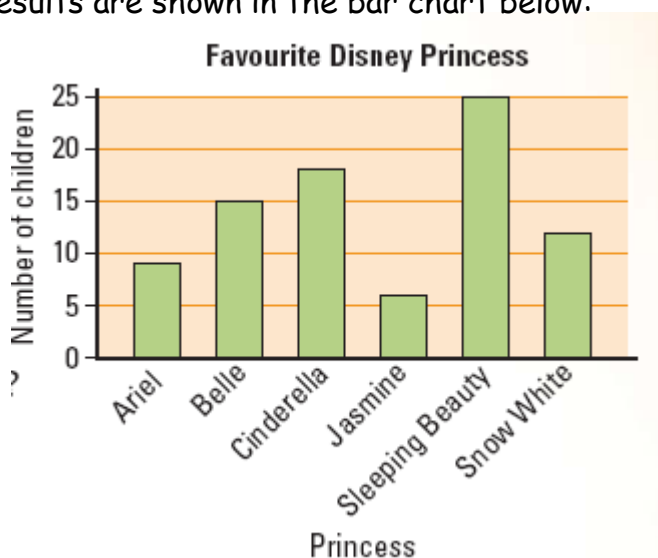
(3)

13. Complete the table:

Fraction	Decimal	Percentage
$\frac{1}{10}$		
		25%
	0.5	
$\frac{3}{4}$		

(4)

14. A group of girls were asked to name their favourite Disney Princess. The results are shown in the bar chart below:



a) Which was the most popular Princess? (1)

b) How many girls chose Cinderella? (1)

c) How many girls took part in the survey? (2)

(Total 4 marks)

15. A child's coach fare is half of the adult fare.
Use this formula to complete the table: 'child fare = adult fare \div 2'.

Adult fare (£)	1	2	3	4.50	7	15	25.50
Child fare (£)	0.50						

(2)

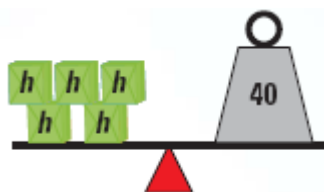
16. In a class there are 3 boys to every 5 girls. There are 9 boys in the class. How many girls are there?

..... (2)

17. In a science test Penny scored 17 marks out of 20.
What percentage is this?

..... (2)

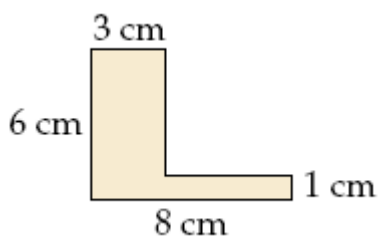
18. The scale below is balanced.



What is the value of h?

(2)

19. a) Find the perimeter of this shape. It is not drawn to scale.



..... (2)

b) What is the area of the shape above? Include units in your answer.

..... (2)

(Total 4 marks)

20. Rebecca asks her friends how many pets they have. The results were:

2 1 3 2 2 7 1 2 3 5

a) What is the mode? (2)

b) What is the range? (1)

c) Calculate the mean (2)

(Total 5 marks)

21. Work out:

a) $\frac{3}{5} + \frac{3}{4}$

b) $\frac{6}{7} - \frac{3}{14}$

(4)

22. Put the following in order of size, starting with the largest.

0.65

$\frac{3}{5}$

0.7

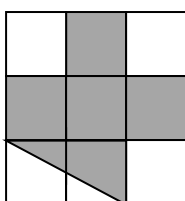
$\frac{3}{4}$

$\frac{2}{3}$

.....

(2)

23. What fraction of the shape below is shaded?



.....

(2)

24. The following is an extract from a train timetable

Depart Durham	Arrive London
08.36	11.17
09.33	12.18
10.51	13.21
11.33	14.18
12.41	15.34
13.33	16.18
14.33	17.54

I need to be in London for 3pm:

a) What is the latest train I can catch in Durham, so that I arrive in time?

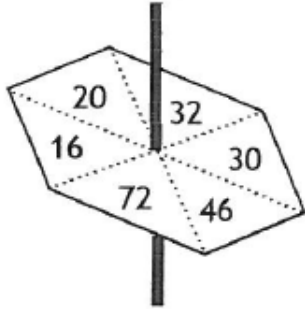
..... (2)

b) How long will my journey be?

..... (2)

(Total 4 marks)

25.



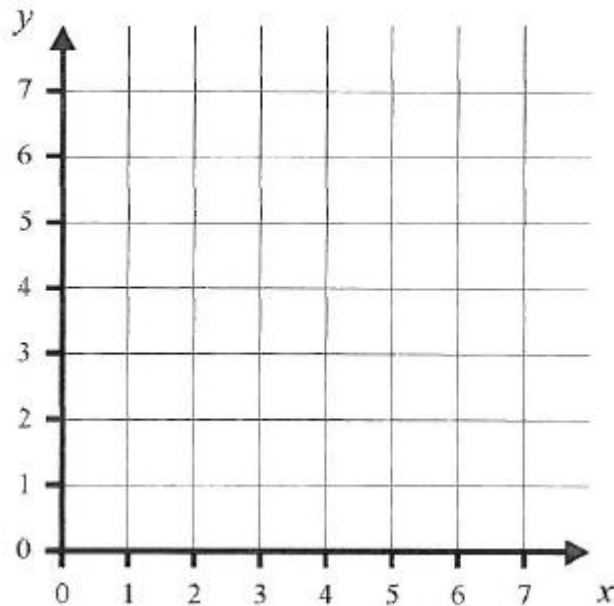
This spinner has an equal chance of landing on any of the numbers.

What is the probability that it will land on a multiple of 4? Give your answer as simply as possible.

..... (2)

26. Plot the following points on the grid

$A(2, 2)$, $B(4, 2)$, $C(2, 6)$, $D(4, 6)$



(2)

Join the points in the order ABCD.

What is the mathematical name for the shape have you drawn?

..... (1)

(Total 3 marks)

END OF QUESTIONS
NOW CHECK THROUGH YOUR WORK

TOTAL 90 MARKS