

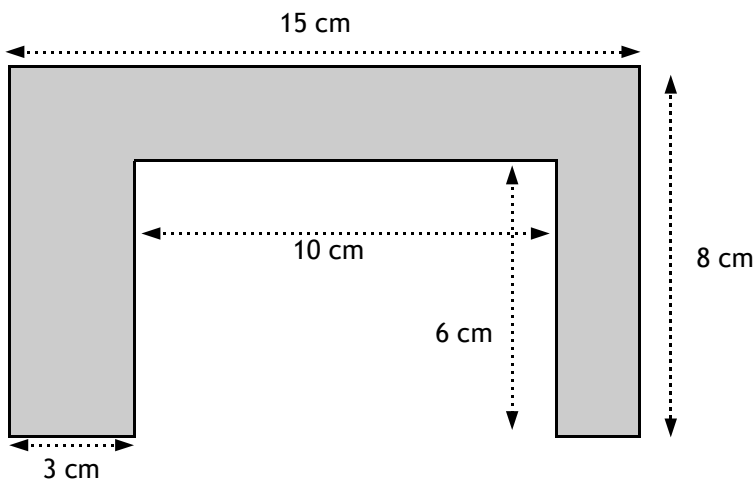
# 11+ Mathematics - Sample Paper.

You have 35 minutes to complete this paper.

- Q 1. Lucy goes to a Holiday Club every weekday for five weeks during the holidays. She pays £0.60 each time she goes.

How much does she pay in total during the holiday? £ \_\_\_\_\_

Q 2.



What is the area of this shape? \_\_\_\_\_ cm<sup>2</sup>

- Q 3. Yvonne spends  $x$  pounds each day on her lunch at school. She spends  $y$  pounds each week on a bus pass to get her to and from school. How much does Yvonne spend altogether in 6 weeks? Place a cross in the appropriate box.

- A.  $30y + 30x$
- B.  $6x + 6y$
- C.  $30y + 6x$
- D.  $6y + 42x$
- E.  $30x + 6y$

- Q 4. Mrs Whiting bought 144 “lucky bags” for the Brownies Christmas party. They come packed in boxes of 16.

How many boxes of “lucky bags” did Mrs Whiting buy? \_\_\_\_\_

Q 5.

9	M	
	10	
13		

This is a magic square.  
All the columns, rows and diagonals add up to 30.  
Several numbers have been missed out.

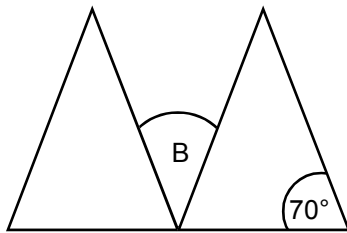
What number should replace the letter  $M$ ? \_\_\_\_\_

- Q 6. In a local sweet shop there 360 boxes of Belgian Chocolates.  
48 are given away as prizes in a special Valentine's prize drawer.  
192 are sold to the public at £4.60 a box.

How many boxes remain unsold? \_\_\_\_\_

- Q 7. Alexander's grandma is 5 times as old as Alexander was 3 years ago.  
If Alexander's grandma is 60, how old is Alexander? \_\_\_\_\_

- Q 8. This shape has been created using two identical isosceles triangles.

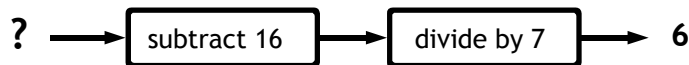


What is the angle at point B? \_\_\_\_\_ °

- Q 9. Mr and Mrs Fitzgerald take their 3 children to a special pop concert. Tickets cost £7.00 each for adults. The price of a child's ticket is half that of an adult's.

How much does it cost the family to visit the theme park? £ \_\_\_\_\_

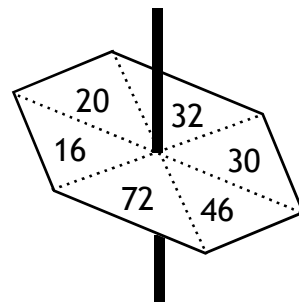
- Q 10. This is Sandra's function machine.



What number did she start with? \_\_\_\_\_

- Q 11. This spinner has an equal chance of landing on any of the numbers.

What is the chance that it will come to rest on a number that is a multiple of 6?



Write your answer as a fraction in its lowest possible terms. \_\_\_\_\_

Q 12.

Find the missing number so that the equation balances.

$$8 \times 9 - 16 = 7 \times 5 + \underline{\hspace{2cm}}$$

Q 13.

Colin has six 50 pence pieces, two 20 pence pieces, two ten pence pieces and five 5 pence pieces in her pocket.

How much money does he have in total?

£           

Q 14.

Which one of the following numbers is a factor of 2, 5 and 6?

Circle the appropriate answers.

20    35    40    55    60

Q 15.

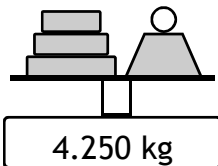
A box contains 2 blue pencils, 3 green pencils and 4 red pencils.

If I pick a pencil from the box at random (with my eyes shut), what is the probability that I will pick out a green one?

Circle the appropriate answer.

A.  $\frac{2}{7}$     B.  $\frac{1}{3}$     C.  $\frac{1}{5}$     D.  $\frac{1}{4}$     E.  $\frac{2}{6}$ 

Q 16.



Roger places some weights on an electronic scale. He needs to make a total of 5.5 kg.

Which two of the weights below should he choose to make up the weight to the correct amount?Circle the two appropriate letters.

625g

A

750g

B

650g

C

400g

D

500g

E

Q 17.

This half term Martin has taken 7 tables tests. Here are his results out of 10:

8    5    9    4    6    4    8

What was his median score?           

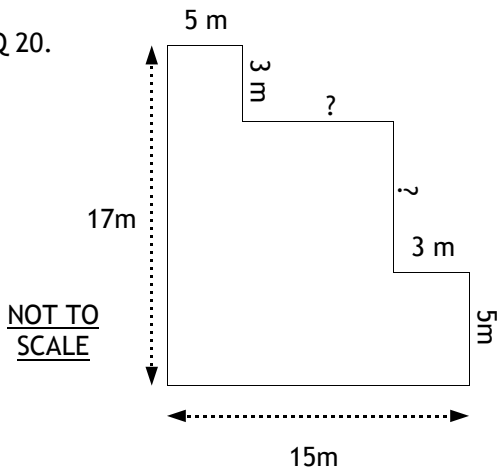
Q 18.

Calculate the following:

$$15000 \div 100 = \underline{\hspace{2cm}}$$

- Q 19. What fraction of a hour is 12 minutes?  
Write your answer in its lowest possible terms. \_\_\_\_\_

- Q 20. This is a floor plan of Mr Buchanan's classroom.

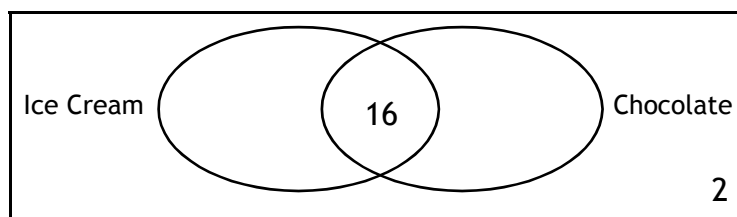


What is the total perimeter of the floor? \_\_\_\_\_ m

- Q 21. The ratio of flour to sugar in a cake is 7 : 4.  
If 200g of sugar was used to make the cake, how much flour was used?

\_\_\_\_\_ g

- Q 22–23. Look at the Venn diagram below. It shows how many children in Mrs Thompson's class like chocolate, ice cream or both. 2 children like neither. There are 32 children in the class.



If 26 children like chocolate and 20 like ice cream:

- Q 22. How many children in the class do not like chocolate? \_\_\_\_\_

- Q 23. How many children only like one flavour? \_\_\_\_\_

- Q 24. Smoked Salmon crisps cost 47p per packet.  
Sophie bought 5 packets for herself and her friends.

How much change would Sophie get from a £5 note? £ \_\_\_\_\_

Q 25. There are 12 sticks of “Minty Fresh” chewing gum in a pack.  
 How many packs could you make from 216 sticks of gum? \_\_\_\_\_ packs

Q 26. The local book shop has a sale.  
 Every item in the shop is reduced by 25%.  
 Melanie buys a set of encyclopaedias.  
 The set normally costs £30.00.  
 How much does Melanie have to pay for the books in the sale? £ \_\_\_\_\_

Q 27. In the same book shop Melanie’s little brother, Robert,  
 bought a picture book for £1.50.  
 What was the price of the picture book BEFORE the sale started? £ \_\_\_\_\_

Q 28. How many faces has a octagonal prism?  
 \_\_\_\_\_

Q 29 - 30.

Q 29. What are the co-ordinates of the points at letter U and letter S? U \_\_\_\_\_ , \_\_\_\_\_  
 S \_\_\_\_\_ , \_\_\_\_\_

Q 30. If you joined the points in alphabetical order, then back to S,  
 what shape would you have drawn? \_\_\_\_\_



You are at the end of the test. If you have time, go back and check your work.

 6

# 11+ Mathematics Sample Paper.

# Answer Sheet

1.

£12.00	[ ]
£14.00	[ ]
£15.00	[ ]
£17.50	[ ]
£18.00	[ ]

2.

72 cm <sup>2</sup>	[ ]
100 cm <sup>2</sup>	[ ]
90 cm <sup>2</sup>	[ ]
48 cm <sup>2</sup>	[ ]
60 cm <sup>2</sup>	[ ]

3.

A	[ ]
B	[ ]
C	[ ]
D	[ ]
E	[ ]

4.

9	[ ]
8	[ ]
14	[ ]
12	[ ]
6	[ ]

5.

15	[ ]
19	[ ]
16	[ ]
14	[ ]
13	[ ]

6.

140	[ ]
135	[ ]
110	[ ]
120	[ ]
105	[ ]

7.

15	[ ]
11	[ ]
12	[ ]
14	[ ]
13	[ ]

8.

60°	[ ]
70°	[ ]
35°	[ ]
40°	[ ]
50°	[ ]

9.

£24.00	[ ]
£24.50	[ ]
£20.50	[ ]
£28.00	[ ]
£26.50	[ ]

10.

58	[ ]
72	[ ]
54	[ ]
66	[ ]
60	[ ]

11.

1/6	[ ]
2/3	[ ]
3/4	[ ]
1/3	[ ]
2/6	[ ]

12.

35	[ ]
31	[ ]
27	[ ]
25	[ ]
21	[ ]

13.

£3.75	[ ]
£4.15	[ ]
£3.50	[ ]
£3.60	[ ]
£3.85	[ ]

14.

20	[ ]
35	[ ]
40	[ ]
55	[ ]
60	[ ]

15.

A	[ ]
B	[ ]
C	[ ]
D	[ ]
E	[ ]

16.

A	[ ]
B	[ ]
C	[ ]
D	[ ]
E	[ ]

17.

6	[ ]
7	[ ]
5	[ ]
9	[ ]
8	[ ]

18.

15.00	[ ]
150.00	[ ]
1500.00	[ ]
1.50	[ ]
00.15	[ ]

19.

3/8	[ ]
3/10	[ ]
1/3	[ ]
1/5	[ ]
3/10	[ ]

20.

80m	[ ]
48m	[ ]
72m	[ ]
144m	[ ]
64m	[ ]

21.

400g	[ ]
350g	[ ]
250g	[ ]
325g	[ ]
275g	[ ]

22.

6	[ ]
8	[ ]
10	[ ]
12	[ ]
4	[ ]

23.

12	[ ]
14	[ ]
16	[ ]
10	[ ]
4	[ ]

24.

£2.35	[ ]
£2.50	[ ]
£3.10	[ ]
£2.65	[ ]
£1.95	[ ]

25.

18	[ ]
15	[ ]
12	[ ]
22	[ ]
14	[ ]

26.

£15.00	[ ]
£21.50	[ ]
£17.50	[ ]
£22.50	[ ]
£20.00	[ ]

27.

£2.00	[ ]
£3.50	[ ]
£1.95	[ ]
£2.20	[ ]
£3.00	[ ]

28.

10	[ ]
7	[ ]
9	[ ]
8	[ ]
6	[ ]

29.

U ( 2 , 6 ) S ( 6 , 4 )	[ ]
U ( 6 , 2 ) S ( 6 , 4 )	[ ]
U ( 2 , 6 ) S ( 2 , 6 )	[ ]
U ( 6 , 2 ) S ( 4 , 6 )	[ ]
U ( 6 , 8 ) S ( 6 , 2 )	[ ]

30.

Parallelogram	[ ]
Pentagon	[ ]
Rhombus	[ ]
Trapezium	[ ]
Kite	[ ]

11+ Mathematics Sample Paper.      Answers

1	£15.00	11	1/3	21	350g
2	60 cm <sup>2</sup>	12	21	22	6
3	E	13	£3.85	23	14
4	9	14	60	24	£2.65
5	14	15	B	25	18
6	120	16	B and E	26	£22.50
7	15	17	6	27	£2.00
8	40°	18	150	28	10
9	£24.50	19	1/5	29	U ( 6 , 2 ) S ( 4 , 6 )
10	58	20	64 m	30	Parallelogram

IPS Educational Publishing

Eleven Plus Mathematics papers.

To purchase a book containing a further 10 papers visit:

**[www.elevenplus.com](http://www.elevenplus.com)**