



SAMPLE TEST FOR SALE

6

Registration No:

Surname:

First Name:

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THE LATYMER SCHOOL

MATHEMATICS ENTRANCE TEST 2002

Time allowed: One hour

Read these instructions before you start:

- There are 50 questions in this paper and each question is worth one mark. Work through the questions in the order that they appear. There may be some questions that you cannot do. Leave these and go on to the next question: you may have time to return them at the end for another attempt.
- Use the space by each question to work out your answer. The blank pages may be used for working if there is not enough space by the question.
- You may use a pen or a pencil for this test.
- Calculators are not allowed.

Mark	Examiner

This paper consists of 50 questions on 9 printed pages.



LATYMER SCHOOL
MATHEMATICS ENTRY TEST 1 hour

1. Work out $2003 - 176$

Answer

2. How many **thousands** are there in **one million** ?
Write the answer in **figures**.

Answer

3. 12 cakes can be made for **£1.92**. How much does each cake cost ?



Answer.....pence.

4. There are **183** pupils in the new year 7 .
Every pupil is given a sticker to wear in their first week of school.
Stickers are sold **only in packs of 15**.
14 packs are bought, how many stickers are left over ?

Answerstickers

5. James keeps a jar of **20p** coins to buy presents for his family.
He took out **£ 6.40** for a Mothers' Day present.
How many coins was this ?



Answercoins

6. Alex does the washing up after dinner on every 31st of the month.
How many times does Alex wash up in two years starting on January 1st ?

Answertimes

7. Find the number that is exactly half way between 59 and 225 .

Answer

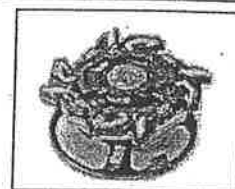
8. Every time you see ★ in this addition sum it stands for the same number.

$$\begin{array}{r}
 1 \star \\
 + \star 1 \\
 \hline
 \star \star \\
 \hline
 1 \ 6 \ 5
 \end{array}$$

What number does ★ stand for ?

Answer

9. Amir's Beyblade spinner spins for 2 minutes 4 seconds,
this was 37 seconds longer than the old record.
What was the old record ?



Answer.....min.....sec.

10. People with grey hair will remember that before 1971, 1 shilling = 12 pence.
A mars bar cost 4 pence,
one packet of popcorn cost 6 pence.
For an evening with friends listening to Beatles records, Amy buys 4 mars bars
and 3 packets of popcorn.
How much does this cost in shillings and pence ?

Answershillings.....pence



11.

	black	silver	total
BMW			
VOLVO	5		8
total	9		21

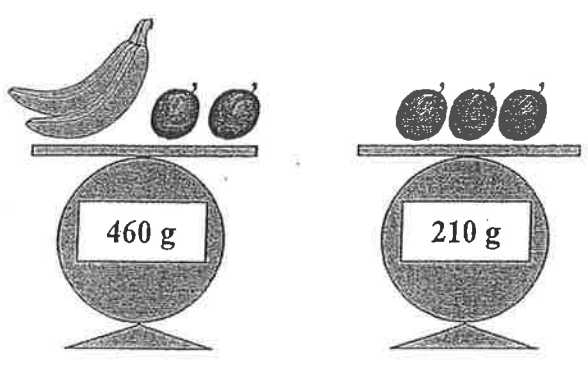
The table shows how many cars are for sale at a local garage.

By filling in the table find how many silver BMW's there must be.

Write your answer here

Answer

12.



How much does one banana weigh ?

Answergrams

13. Kiran's five lunches this week have cost

£ 1.50 , £ 1.30 , £ 1.70 , £ 1.55 , £ 1.45

Find the average cost of a lunch.

Answer £.....

14. Write the number 'eighty-six thousand eight hundred and fifty-six' in figures to the nearest 100.

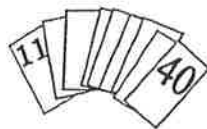
Answer

15. Put a ring round the smallest fraction.

$\frac{11}{12}$ $\frac{5}{6}$ $\frac{3}{4}$ $\frac{7}{8}$ $\frac{19}{24}$



Raffle tickets numbered 11 to 40 are sold.



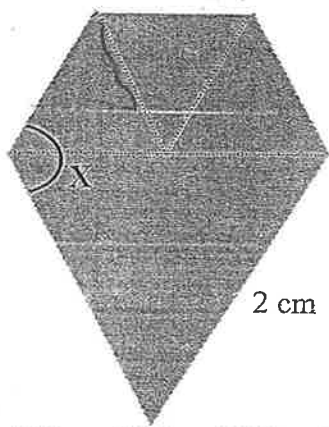
16. How many tickets are sold ?

Answer

17. What is the probability that the number on the winning ticket can be **divided exactly by 5** ? Give your answer as a fraction.

Answer

18.



The shape is made up from 4 equilateral triangles.
Work out the distance all the way **round the outside** of the shape.

Answercm.

19. Looking again at the diagram in question 18, write down how many degrees there are in the whole of the angle x

Answer x =degrees

In these two questions # means

'multiply the first number by 3 and add the second number.'

So $2 \# 5 = 3 \times 2 + 5 = 11$

20. Find $7 \# 9$

Answer

21. Find \blacksquare if $\blacksquare \# 1 = 19$

Answer $\blacksquare =$



22.



Jo's clock 'tings' once every $\frac{1}{4}$ past the hour, twice every $\frac{1}{2}$ past, and three times every $\frac{1}{4}$ to.
(The 'bong' to strike the hour is broken).
How many times will Jo's clock 'ting' between the times 2010 and 2116 on the same evening ?

Answer

A book on 'how to cook using a microwave' says
'double the quantity takes $1\frac{1}{2}$ times the time'

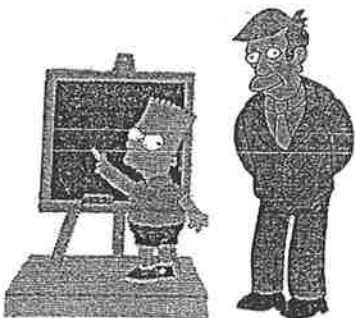
23. 1 sausage takes 3 minutes
How long will 2 sausages take ?

Answermin

24. 1 jacket potato takes $5\frac{1}{2}$ minutes
How long will 2 jacket potatoes take ?

Answermin

25.



Bart wrote
'I must try much harder not to be so rude to
Principal Skinner '
67 times before being allowed to go home.
How many words did Bart write ?

Answerwords



31.



A sunflower grows **6 cm** every day.
 At the end of Monday it was **79 cm** tall..
 How tall in metres and centimetres will it be after **7 more days** have passed ?

Answerm.....cm

32. X - MEN can find what X is when it appears once in an equation.

Find X if $3X - 1 = 11$

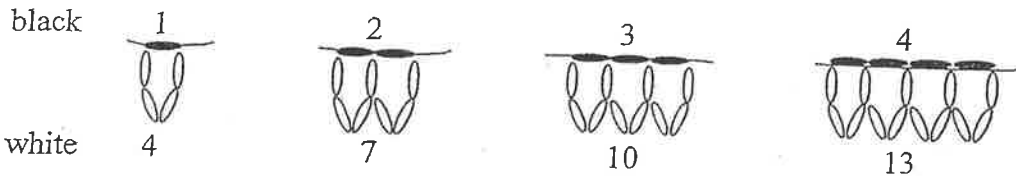
Answer X =

33. X - MEN 2 can find what X is when it appears twice in an equation.

Find X if $X + 4 = 20 - X$

Answer X =

Necklaces can be made using black beads and white beads; here are some.....



34. How many white beads are there in a necklace that has **6 black** beads ?

Answer

35. How many white beads are there in a necklace that has **20 black** beads ?

Answer

36. If **x** is the number of black beads write down a formula for the number of white beads (**W**).

Answer W =



37. Adult rabbits eat 7 carrots a day.
Baby rabbits eat 4 carrots a day.

How many rabbits, in total, would eat 34 carrots a day ?



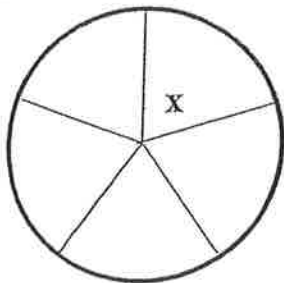
Answerrabbits

-
38. There are 28 pupils in a class.
15 play the piano, 8 play the violin, 12 do not play any musical instrument.

How many play both piano and violin ?

Answer

39.



A wheel has 5 equally spaced spokes.

Write down the angle x degrees.

Answer $x =$ degrees

-
40. A and B are the same number, and $2A + 3B = 45$

Put a ring round the correct value of A below.

2

3

5

7

9

-
41. Given that $7656 \div 132 = 58$,

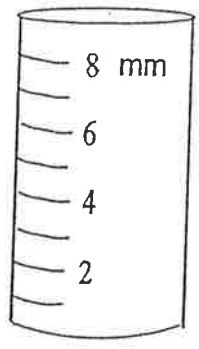
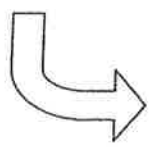
write down the value of $7656 \div 13.2$

Answer

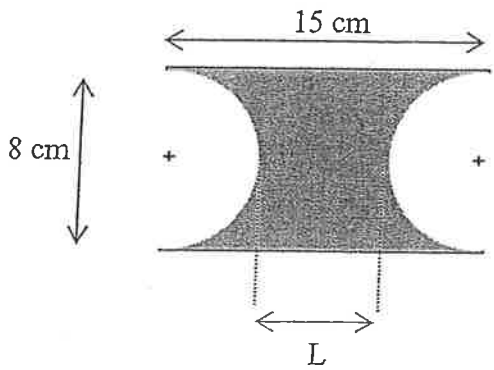


47. Rain falling in a cylinder would, if it rained that long, fill it to a depth of 4 cm in 24 hr.

Put 3 hr worth of rain in the cylinder.



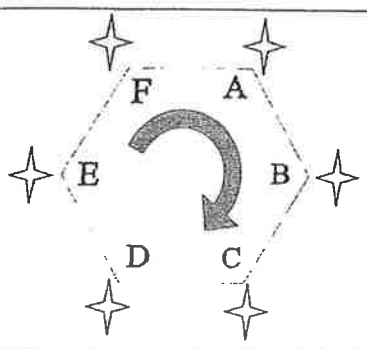
48.



Two semi-circles are cut from a rectangle.
Work out the length of the line marked L.

Answer L =cm.

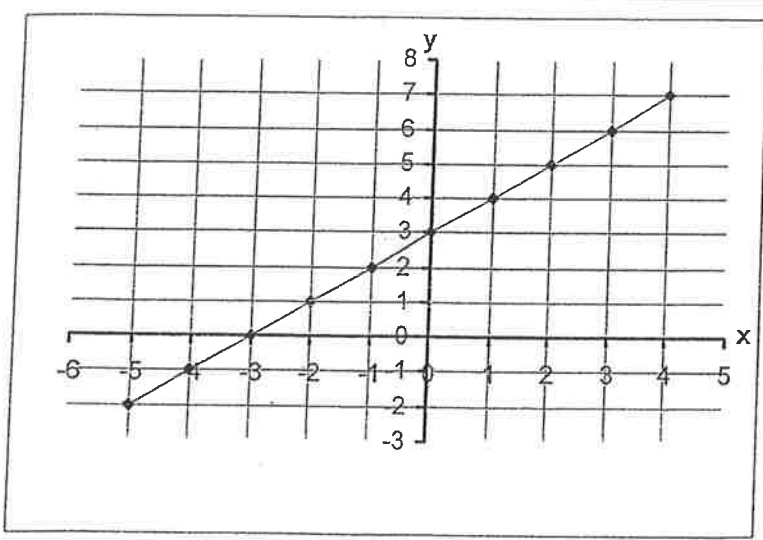
49.



Stars twinkle in order A, B, C, D, E, F, A, B,.....
It takes 3 seconds to change from A to B, 3 seconds from B to C, and so on.
Starting at A, which star twinkles after 1 minute?

Answertwinkles

50.



Put a ring round the **one other** point that is on the line.

(2000, 2001)

(2000, 2002)

(2000, 2003)

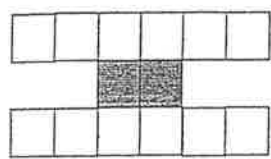
(2000, 2004)

(2000, 2005)

END , you may go back and check your answers.



ANSWERS TO ENTRY TEST PAPER DECEMBER 2003

- | | | | |
|------|----------------------|------|--|
| 1. | 1827 | 28. | -130 m |
| 2. | 1000 | 29*. | 5 friends |
| 3. | 16 pence | 30. |  |
| 4. | 27 stickers | 31. | 1 m 21cm |
| 5. | 32 coins | 32. | $X = 4$ |
| 6. | 14 times | 33. | $X = 8$ |
| 7*. | 142 | 34. | 19 |
| 8. | 7 | 35. | 61 |
| 9. | 1min 27sec | 36. | $W = 3x + 1$ or equivalent |
| 10. | 2 shillings 10 pence | 37. | 7 rabbits |
| 11. | 9 | 38. | 7 |
| 12*. | 160 grams. | 39. | 72 degrees |
| 13. | £1.50 | 40. | 9 |
| 14. | 86900 | 41*. | 580 |
| 15. | $\frac{3}{4}$ | 42. | $A = B + D$ is false |
| 16*. | 30 | 43. | 728 ml |
| 17. | $\frac{1}{5}$ | 44*. | 750 |
| 18. | 7 cm | 45. | 12 |
| 19. | 120 degrees | 46. | 30 min |
| 20. | 30 | 47*. | 5 mm high to be drawn in |
| 21. | 6 | 48. | $L = 7$ cm |
| 22. | 7 | 49. | C twinkles |
| 23. | $4\frac{1}{2}$ min | 50*. | (2000, 2003) |
| 24*. | $8\frac{1}{4}$ min | | |
| 25. | 871 words | | |
| 26. | 24 | | |
| 27. | 25% | | |

* proved to be more difficult than most

Mean test score 32.1
Median test score 31.9

