



4

SAMPLE TEST
FOR SALE

Registration No:

Surname:

First Name:

Copyright of The Latymer School



QUI PATIATUR VINCI

2001

THE LATYMER SCHOOL

MATHEMATICS ENTRANCE TEST

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 to 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. You need a short ruler.
- Calculators are not allowed.

Mark	Examiner

This paper consists of 50 questions on 10 printed pages.



LATYMER SCHOOL
MATHEMATICS ENTRY TEST 1 hour

1. Write down the number 'one million, three hundred thousand' in figures.

Answer _____

2. What number does ☆ stand for in

this subtraction sum ?

$$\begin{array}{r} 7\star 1 \\ - 245 \\ \hline 486 \end{array}$$

Answer ☆ stands for _____

3. What is $3160 \div 100$

Answer _____

4. How many 9 cm ribbons can be cut from a 3 m length of ribbon ?

Answer _____

5. One baby is born into the world every 12 seconds. How many are born while you are doing this test lasting exactly one hour ?



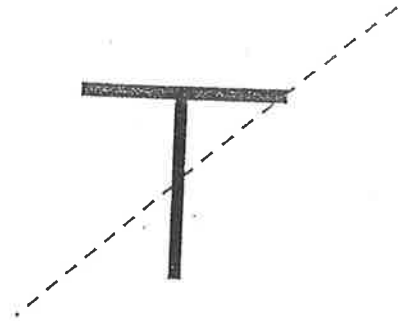
Answer _____

6. I pay £6.99 a month for a cable T.V. channel.
How much is this in a year ?

Answer £ _____

12. Complete the diagram by drawing

the reflection of the T in the dotted line.



13. What is 50% of $\frac{2}{10}$?

Answer _____

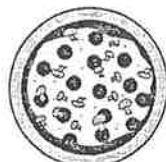
14. Jo buys an equal number of 24p and 26p stamps.
The total cost is £10.
How many stamps did Jo buy altogether ?

Answer _____ stamps

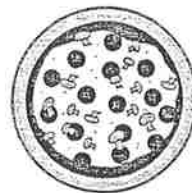
15. Subtract the largest odd number less than 200 from the smallest even number greater than 500.

Answer _____

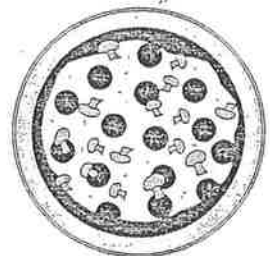
16. If I buy a large pizza I get £2 off any medium or small.
What do I have to pay in total for one large pizza with two extra toppings and one medium pizza ?



small
£ 6.29



medium
£ 7.99



large
£ 10.49

EXTRA TOPPINGS 53p

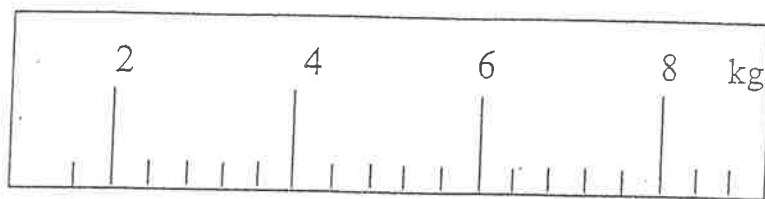
Answer £ _____

17. If $y - 469 = 781$

then $y - 461 = ?$

Answer $y - 461 =$ _____

18.

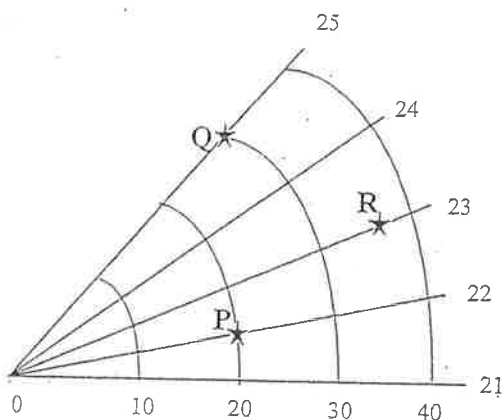


What weight in kg does the arrow point at ?

Answer _____ kg

19. One pint of milk every day, except for Saturday when two are delivered, costs £3.68 a week. How much in pence does one pint of milk cost ?

Answer _____ p



20. The point P is at 2022. Write down the exact position of Q

Answer Q is at _____

21. Using the same diagram write down as close as you can (using only 4 numbers) the position of R.

Answer R is at _____



22. Grapes cost £ 3.50 a kilogram. How much would 200 grams cost ?



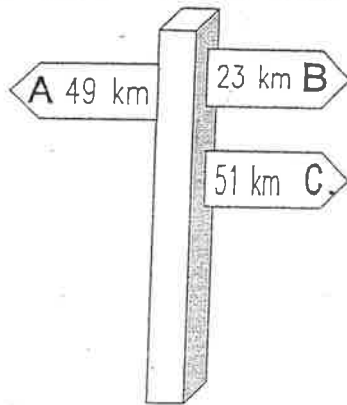
Answer £ _____

23. In Ms Green's class there are 31 pupils.
Of these pupils 9 play the piano, 5 play the guitar, but 22 pupils do not play either instrument.

How many pupils play both piano and guitar ?

Answer _____ pupils

24.



A, B and C are three towns on a straight road. A nurse lives at B.
To visit patients in their homes she has to travel from B to C to A and back to B.
How far is this ?

Answer _____ km

25. The probability of an April day being windy is $\frac{3}{5}$.

How many days next April would you expect to be windy ?



Answer _____ days

26. A number is 'buzzed' by adding together all of its digits.

So 542 'buzzed' is equal to $5 + 4 + 2 = 11$

What is the smallest number which can be 'buzzed' to give an answer of 15 ?

Answer _____

27. I fill the car with 20 litres of petrol costing 74.9 pence a litre, but I have a token giving me 4 p off every litre.
How much do I pay for the petrol ?



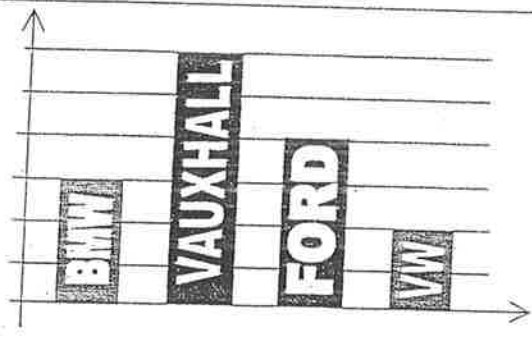
Answer £ _____

28. How much would you have to pay for this guitar ?



Answer £ _____

29. The bar chart shows how many cars were in a car park at 9am on Tuesday.
There were 12 Fords.
How many cars were there altogether ?



Answer _____

30. Happy hens lay 5 eggs every week. Unhappy hens lay 4 eggs every week.
Mira's hens between them lay 31 eggs every week.
How many hens does Mira have ?



Answer _____ hens

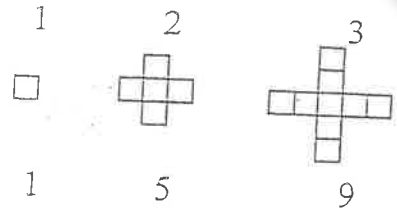
31. Rajiv and Rachel collect Pokemon cards. They have 480 between them but Rachel has three times as many as Rajiv.
How many does Rachel have ?



Answer _____

Here are some tiling patterns:

pattern number



number of tiles

1 5 9

32. How many tiles are there in the 10th pattern ?

Answer _____

33. What number pattern has 101 tiles ?

Answer _____

34.



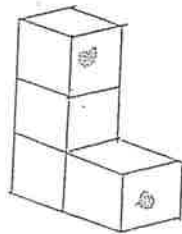
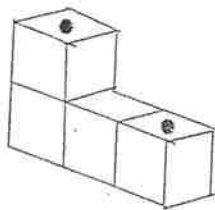
The diagram shows that twice as many drink coffee as do those who drink tea.
What is the angle marked x ?

Answer $x =$ _____ degrees

35. $6840 \times 0.65 = 4446$
 $3420 \times 0.65 = ?$

Answer _____

36.



The second object is identical to the first but shown in a different position.
Put the dots on the second object.

37.

2	11
4	17
7	26
10	?

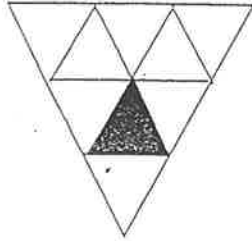
Look at the numbers in the boxes.
What number goes in the empty box ?

Answer _____


38. A tube train takes 4 min to travel a distance of 1.2 km.
How fast is the train going in km. per hour.

Answer _____ km/hr

39.



The area of the whole shape is 128.7 square cm.

What is the area of the black piece  ?

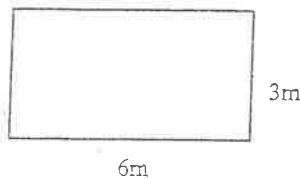
Answer _____ square cm.

40.



One litre of paint covers 4.5 square metres.

How many litres must I buy so that I have enough to paint a wall 6 m long and 3 m high ?



Answer _____ litres



The job of every machine is to 'multiply by 2 then add 7'

So 4 put in at A becomes 15 at B and so on.....

41. If 4 is put in at A what comes out at D ?

Answer _____

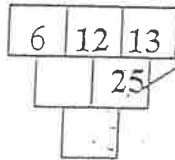
42. What number put in at A becomes 29 at C ?

Answer _____

43. In a game a wizard is twice as powerful as an elf, an elf is 5 times as powerful as a troll, and a troll is one and a half times as powerful as a dwarf. How many times more powerful than a dwarf is a wizard?

Answer _____ times

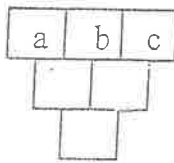
44.



The number in this square comes from adding the two above it, so $12 + 13 = 25$. Using this rule for the two remaining squares what number do you get in the bottom square?

Answer _____

45.



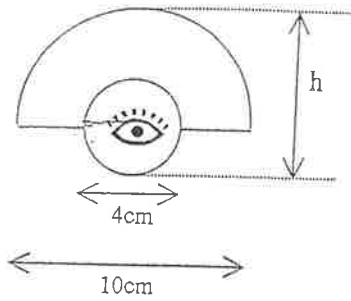
Using the same rule as in the question above, what expression do you get in the bottom square?

Answer _____

46. Carl has forgotten how tall he was when measured last week. Ali and Ben know that they were 1.60 m and 1.65 m and that the average of all three of them was 1.64 m. How tall was Carl?

Answer _____ m

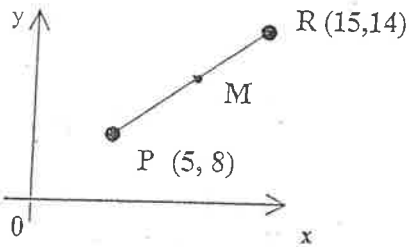
47.



A new logo is designed for a security company. What would height h be in cm. ?

Answer _____ cm

48.



M is the mid-point of the line from P to R

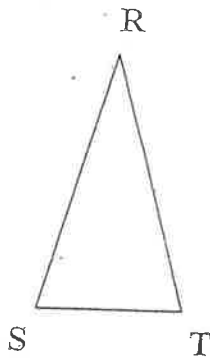
Write down the position of M

Answer M is (_____ , _____)

49. There are 6 red, 7 green and 5 blue beads in a bag. What is the smallest number of beads taken out (without looking !) before I can be sure of getting at least 2 of each colour?

Answer _____ beads

50.



Triangle RST is isosceles and has a perimeter of 35cm.

Sides RS and RT are each twice as long as ST. ?

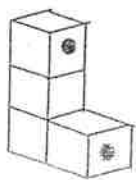
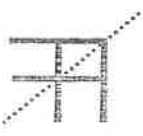
What is the length of ST ?
(do not use a ruler)

Answer _____ cm

END OF TEST you may go back and check earlier questions

LATYMER MATHEMATICS ENTRY TEST NOVEMBER 2001

ANSWERS (* means found to be harder than most)

- | | | | |
|------|--|------|---|
| 1. | 1300000 | 27*. | £14.18 |
| 2. | 3 | 28. | £116 |
| 3. | 31.6 (31.60) | 29. | 45 |
| 4. | 33 | 30*. | 7 hens |
| 5. | 300 | 31. | 360 |
| 6. | £83.88 | 32. | 37 |
| 7. | 256 (possible ambiguity, 128) | 33*. | 26 |
| 8. | 17 min 13 sec | 34. | 120 degrees |
| 9. | 27p | 35. | 2223 |
| 10. | 10 hundredths | 36. |  |
| 11. | 299 (276 + 23) | | |
| 12. |  | | |
| 13*. | $\frac{1}{10}$ (0.1) | 37*. | 35 |
| 14. | 40 | 38*. | 18 km /hr |
| 15. | 303 | 39. | 14.3 sq cm |
| 16. | £17.54 | 40. | 4 litres |
| 17. | 789 | 41. | 81 |
| 18*. | 5.6 kg | 42. | 2 |
| 19. | 46p | 43*. | 15 times |
| 20. | 3025 | 44. | 43 |
| 21. | 3623 (3723) | 45** | $a + 2b + c$ ($a + b + b + c$) |
| 22. | £0.70 | 46. | 1.67 m |
| 23. | 5 pupils | 47. | 7 cm |
| 24. | 200 km | 48. | (10, 11) |
| 25. | 18 days | 49*. | 15 beads |
| 26*. | 69 | 50*. | 7 cm |

