

# 10

**PLEASE NOTE:**  
Papers 1 - 4 have been discontinued.  
For 2008 the packs contain  
6 Mathematics Papers numbered 5 – 10

**SAMPLE TEST  
FOR SALE**

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**THE LATYMER SCHOOL**

**MATHEMATICS ENTRANCE TEST 2007**

**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.
- **Calculators are not allowed.**

This paper consists of **50 questions** with answers at the back.



**LATYMER SCHOOL  
MATHEMATICS ENTRY TEST 1 hour**

2007

1. Write in figures the number that is 7 less than half a million.

Answer .....

Work out what ■ and \* must stand for in this subtraction sum.

$$\begin{array}{r} 2163 \\ - 8*4 \\ \hline 1■89 \end{array}$$

2. Answer \* = .....

.....

3. Answer ■ = .....

4. Work out  $8 \times 999999$

Answer .....

5. Put a ring round the number that is 352 thousandths.

- 3.520      0.352      0.0352      0.00352      0.000352

6. Every week 185 grams of junk mail comes through my letter box. I recycle all this paper every 8 weeks; what weight of paper is this in Kilograms ?



Answer .....Kg.



7. A bottle holds 420 ml of water when it is  $\frac{3}{5}$ ths full.

How much does it hold when full ?

Answer .....ml

8. How many **hundreds** are there in **one million** ?  
Write the answer in **figures**.

Answer .....

9. Peter collects stamps and buys them in packs of 40 for £ 1.90 a pack.  
He used some money he had saved and bought 360 stamps.  
How much did it cost him ?



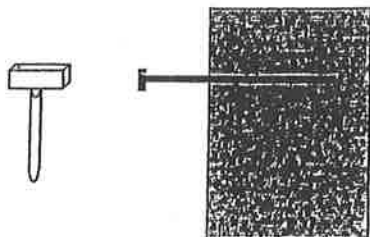
Answer £ .....

10. Henry works out that if he cuts his own hair instead of paying £7 for a haircut every 6 weeks, then in 6 years he will have saved the exact amount needed for a computer. How much does the computer cost ?



Answer £ .....

11.



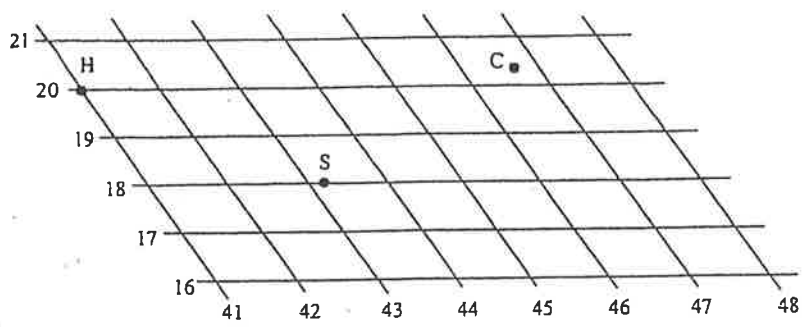
A nail is hammered 28.6 mm into a wall.  
If 1.5 cm is still outside, what is the total length of the nail in cm ?

Answer ..... cm

12. It takes 1 minute 10 seconds to cook a pancake. Cooking them one at a time, how many pancakes can be cooked in 14 minutes ?



Answer .....pancakes



The school ( S ) is at 432,180

3. Where is the house ( H ) ? Answer H is at .....

4. Where is the church ( C ) ? Answer C is at .....

5. A film on TV is on from 7.30 pm to 9.15 pm but in that time there are 18 minutes of adverts. How many minutes does the film last without adverts ?

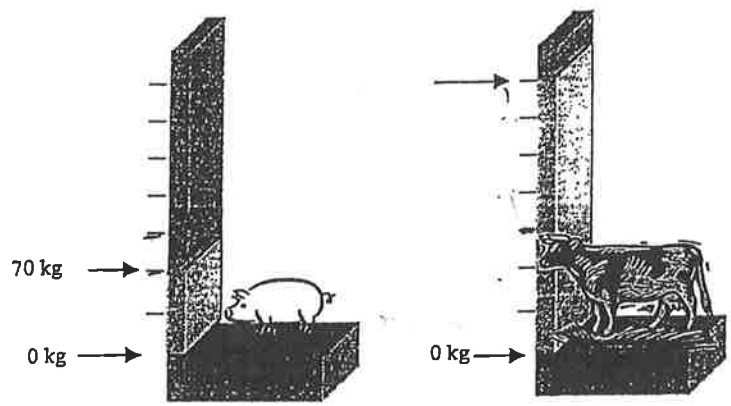
Answer .....minutes

16. A spray that kills 99% of all germs is sprayed on 1000 germs. How many escape ?



Answer .....escape

17.



The pig weighs 70kg.

How heavy is the cow ?

Answer.....kg

18.

$$4 \times \text{☺} = 6028$$

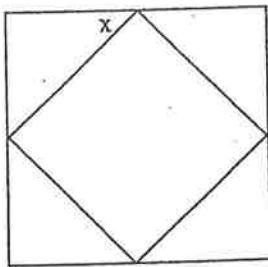
$$5 \times \text{☺} = ?$$

Answer ? = .....

19. To answer a TV quiz you must make a phone call which costs £ 1.60. 6000 people phone, and one person wins the £ 2500 prize. How much profit do the TV and phone company make between them ?

Answer £ .....

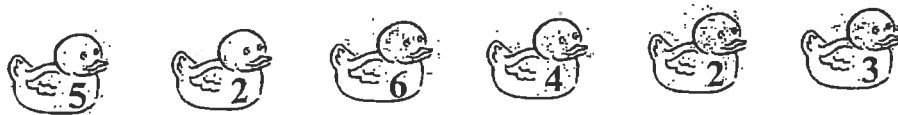
20.



One square is drawn inside another to make a symmetrical figure. What is the angle  $x$  in degrees ?

Answer  $x = \dots\dots\dots$ degrees

21.



Six plastic ducks are on a pond and **three** are taken out whose numbers **total 14**. Put in the numbers on the three that are left.

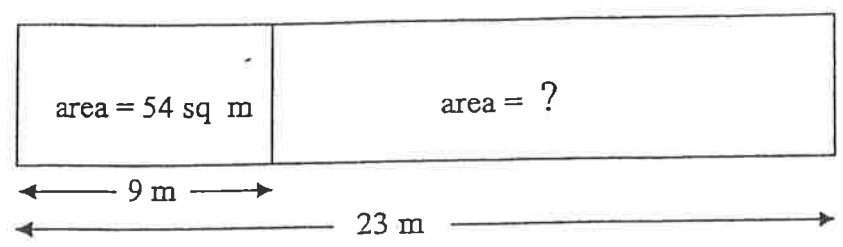
Answer



22. **One** cup of juice is mixed with **four** cups of water to make a party drink. How much juice is there in **two** litres of party drink ?  
(1 litre = 1000 ml )

Answer .....

23.



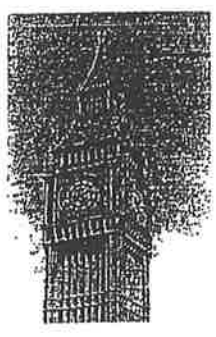
The diagram shows two rectangles.  
 What is the area of the rectangle on the right ?

Answer area = .....sq m

24. Jemina has just come into the country and is allowed **25% extra** in an English test.  
 The test normally lasts **1 hour 8 min**.  
 How long does Jemina get to answer the test ?

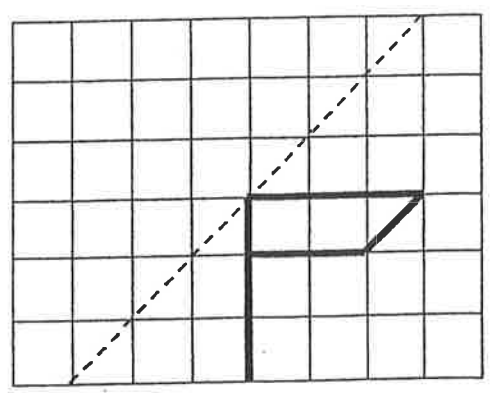
Answer .....hour.....min

25. If you listen to Big Ben you may hear “ding dong ding dong  
 ding dong ding dong”  
 before every **hour** it strikes.  
 How many “dongs” would it do in a whole week ?  
 ( starting at 0001 Sunday morning and finishing at 2400 the following Saturday )



Answer .....dongs

26. Reflect the shape in the dotted line.





27. I have one of those pencils that keeps breaking. Every time I sharpen it I lose  $\frac{1}{4}$  of the length it was just before sharpening it.

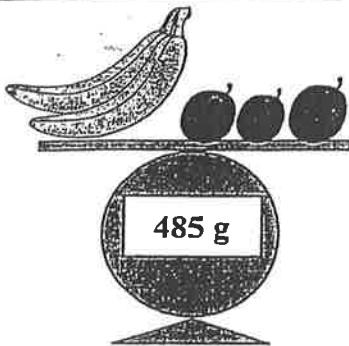
If it was 16cm long to start with, how long is it after I have sharpened it twice ?

Answer .....cm

28. A phone company offers free calls for a month to the first person to phone them having a birthday whose numbers total a multiple of 7.  
So a birthday 29<sup>th</sup> August 2007 would have been good as  $29 + 08 + 2007 = 2044$ , and 2044 can be divided exactly by 7.  
What was the **first good birthday in November 2007** ?

Answer ..... November 2007

29.



One banana weighs 190 grams.  
What is the **average weight of a plum** ?

Answer .....grams

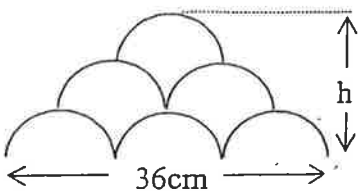
30. If all questions take the same time and Jamie finished answering this question and all the previous questions in **24 minutes**, how long should Jamie take to do the whole test ?

Answer .....minutes

31. Kim works **8 hours** a day for **5 days** and earns **£520**.  
How much does Kim earn per hour ?

Answer £ .....

12.



The pattern in this question is made with semi-circles. What is the length  $h$  ?

Answer  $h = \dots\dots\dots$  cm

13.

$\blacksquare \times 21 = 2982$   
 $\blacksquare \times 18 = 2556$

Answer  $\blacksquare = \dots\dots\dots$

14. Old Daleks could not conquer the world because they could not climb stairs. The new generation of Daleks can climb **1000** stairs in only **40** seconds ! How long would this be for just **one stair** ?



Answer  $\dots\dots\dots$  seconds

15. Alan wants to buy a rock for the garden. Rocks cost **30p** per kilogram. He buys a whopper weighing **19.4** kilograms. How much does it cost him ?

Answer  $\pounds \dots\dots\dots$

16.



A jug containing **930ml** of water is enough to fill **8 identical glasses**. What is the **most** that a glass can hold ?

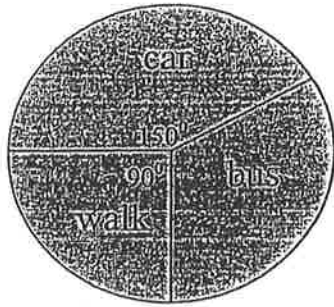
Answer  $\dots\dots\dots$  ml

17. After filling these glasses that hold the most, how much would be left in the jug ?

Answer  $\dots\dots\dots$  ml



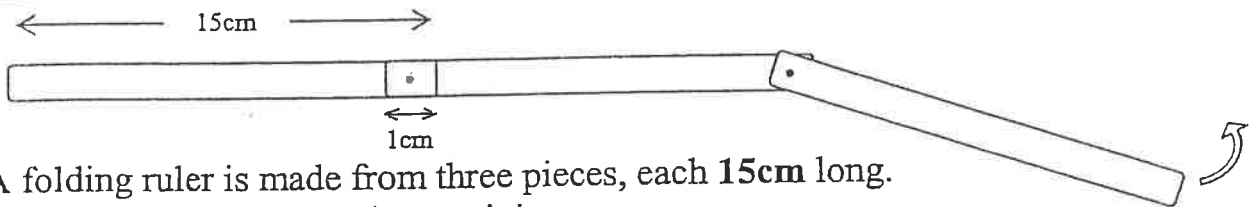
38.



In a survey of year 6 pupils, 48 said they walked to school.  
How many travelled by bus ?

Answer .....

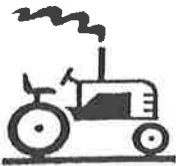
39.



A folding ruler is made from three pieces, each 15cm long.  
They overlap by 1cm at the two joins.  
How long is the ruler when it is fully stretched out ?

Answer .....cm

40.



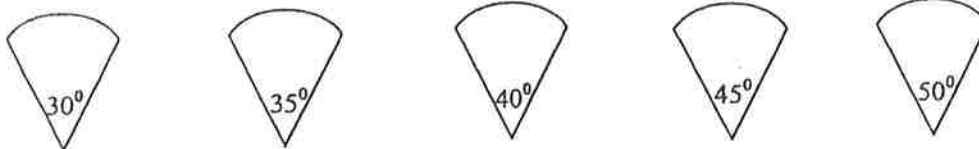
A farmer can plough all his land in 6 days using 2 tractors.  
How long would it take if he could use 3 tractors ?

Answer .....days

41. Write down the next two numbers in the following .....

8      8      7      5      2      .....      .....

42.



Some of these shapes can be used by themselves over and over again to form a circle. Put a tick ✓ in them.

If you multiply

$$5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 2 \times 2 \times 2 \times 2 \times 2$$

you get a very big whole number.

Write in words how many zeros there will be at the end of this number.

(43)

Answer .....zeros

Rachél saves 20p coins in a special hiding place. After a long time she had saved 723 of them and changed as many as she could for £5 notes. How many 20p coins has she still got ?

(44)

Answer .....coins

This addition sum is correct !

(45)

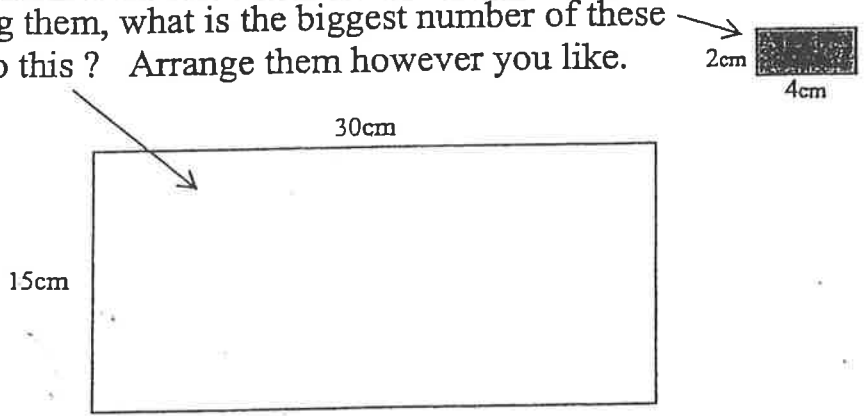
	ticks	tacks
	2	4
+	3	8
	6	5

How many tacks are there in one tick ?

Answer .....

Without cutting them, what is the biggest number of these that will fit into this ? Arrange them however you like.

(46)



Answer .....



47. It rained on **March 21<sup>st</sup>** this year, but was dry for the next **49 days**.  
It then rained on the **50<sup>th</sup>** day after **March 21<sup>st</sup>**. What was the date then ?

day      - month      year

Answer .....2007

- 
48. A beam of light takes  $\frac{1}{6}$  th of a second to go round the world.  
How many times will it go round in **10 minutes** ?



Answer .....times

- 
49. Maddy's garage is **2.15 metres** wide.  
Her car is **1.64 metres** wide.  
She drives her car into the garage so that the gap on the right is twice as much as the gap on the left.  
What is the gap on the **right** in centimetres?

Answer .....cm

- 
50. A father takes his daughter to a pizza restaurant where her meal costs  $\frac{2}{3}$  as much as his. If the total bill was **£ 10.50** how much was it for the **daughter's** meal ?

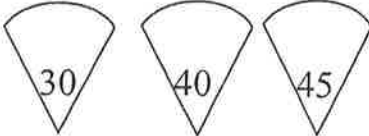
Answer £ .....

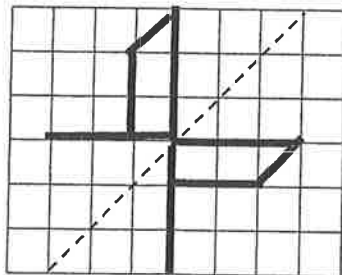


LATYMER SCHOOL

ANSWERS TO MATHEMATICS ENTRY TEST NOVEMBER 2007

910

- |                            |  |
|----------------------------|--|
| 1. 499993                  | 27. 9 cm   |
| 2. 7                       | 28. 5 <sup>th</sup> November 2007  |
| 3. 2                       | 29. 35 grams   |
| 4. 7999992                 | 30. 40 minutes   |
| 5. 0.352                   | 31. £ 13(.00)  |
| 6. 1.48(0) kg              | 32. 18 cm  |
| 7. 700 ml                  | 33. 142  |
| 8. 10000                   | 34. 0.04 seconds   |
| 9. £ 17.10                 | 35. £ 5.82   |
| 10. £ 364(.00)             | 36. 116 ml { but please read }   |
| 11. 4.36 cm                | 37. 2 ml { report on 2007 paper }  |
| 12. 12 pancakes            | 38. 64   |
| 13. H 410,200              | 39. 43 cm  |
| 14. C 46(6or7),20(3or4)    | 40. 4 days   |
| 15. 87 minutes             | 41. -2 , -7  |
| 16. 10 escape              | 42.  |
| 17. 245 kg                 |  |
| 18. 7535                   | 43. five   |
| 19. £ 7100 (.00)           | 44. 23 coins   |
| 20. 45 degrees             | 45. 7  |
| 21. 2 , 2 , 4 in any order | 46. 52   |
| 22. 400 ml                 | 47. 10 <sup>th</sup> May 2007  |
| 23. 84 square metres       | 48. 3600 times   |
| 24. 1 hour 25 min          | 49. 34 cm  |
| 25. 672 dongs              | 50. £ 4.20   |
| 26.                        |  |



Mean test score 29.5  
Median test score 30

