2008/2nd A

Your name:

OUNDLE SCHOOL

Examination for Entrance to the Second Form **Section A**
MATHEMATICS **30 minutes**

Write ALL of your working on this paper. No other paper may be used. The answers alone are of no use. Show enough working on each question to show how you are getting your answer.

You are NOT allowed to use a calculator for this Section. **NO CALCULATORS**

1. Work out $27{\cdot}6 + 183 - 2{\cdot}95$

Answer .....

2. Work out $296 \times 0{\cdot}8$

Answer .....

3. Work out $13621 \div 7$

Answer .....

4. Work out $\frac{3}{4} - \frac{2}{5}$

Answer .....

5. The temperature outside at 7.00pm was $5°C$. Over the next six hours it fell by $11°C$. What was the temperature at 1.00 am?

Answer .....

6. What is 392 minutes in hours and minutes?

Answer .....

7. If a train leaves London at 09.54 am and takes 5½ hours to get to Penzance, when would it arrive?

Answer .....

If the journey is a total of 440 km, how far on average would it travel every hour?

Answer .....

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8. Change 2·4 hours into minutes

Answer .....

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9. John bought a car for £23 000. Over the next two years the value went down by 30%. How much is the car now worth?

Answer .....

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10. Continue the patterns, giving the next two numbers each time:

a) 19, 26, 33, ..., ...

b) 3, 9, 27, ... , ...

c) 14, 8, 2, ... , ...

d) 1, 1, 2, 3, 5, 8, ... , ...

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11. Fill in the missing numbers:

0·52 × ..... = 520

100 ÷ ..... = 2000

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12. If eight people share a lottery jackpot of 6 million pounds,
how much does each person get?

Answer .....

A school is given £1000 to spend on computer equipment. It decides to buy monitors which cost £119.95 each. How many can it buy?

Answer .....

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13. 3 Pears and an apple together cost £1·74. If I buy 4 pears and an apple together, they cost £2·22. Work out the cost of each fruit.

Pear .....

Apple .....

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14. A model car travels 1·6 km in 24 minutes.
How long would it take to travel 1 km?

Answer .....

How many metres would it travel in 21 minutes?

Answer .....

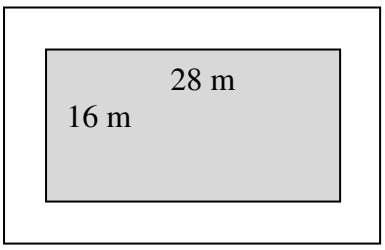
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15. On a clock face, what is the angle between the hands at 10.30?

Answer .....

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16. A rectangular lawn, 16 metres by 28 metres is surrounded by a path 3 metres wide.
Use the diagram to help you work out the area covered by the path.



Answer .....

END OF SECTION A

2008/2nd B

Your name:

OUNDLE SCHOOL

Examination for Entrance to the Second Form **Section B**
MATHEMATICS **30 minutes**

Write ALL of your working on this paper. No other paper may be used. The answers alone are of no use. Show enough working on each question to show how you are getting your answer.
CALCULATORS SHOULD BE USED FOR THIS SECTION.

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1. Use your calculator to work out 253×26

Answer .....

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2. Find 73% of £250.

Answer .....

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3. If 250 drawing pins together weigh 128 grams, what is the weight in grams of a single drawing pin?

Answer .....

A pile of drawing pins weighs 307·2 g. How many are in the pile?

Answer .....

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4. a) Find the mean (average) of the numbers 28, 37, 49, 53, 82, 94.

Answer .....

b) Five people have an average age of 23. When a sixth person joins the group, the average age changes to 21. How old is the sixth person?

Answer .....

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5. If Nick got 47 out of 60 on a test, work out what this is as a percentage to the nearest whole number.

Answer .....

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6. Find the total surface area of a closed box which measures 42 cm × 37 cm × 26 cm.

Answer .....

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7. Work out how many numbers between 1 and 200 are exactly divisible by both 6 and 5.

Answer .....

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8. If I have £9 in 5p coins, how many 5p coins do I have?

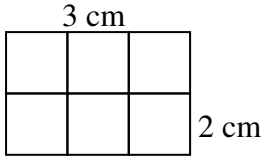
Answer .....

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9. If I multiply a number by 8 and add 5 the answer is 133.
What is the number?

Answer .....

10.



The "3 by 2" grid shown is made up of squares of side 1 cm.

The total length of the grid lines is 17cm (check this).
Work out the following:

a) the total length of the grid lines for a 3 by 5 grid.

Answer .....

b) the total length of the grid lines for a 20 by 40 grid.

Answer .....

END OF EXAMINATION