CANDIDATE
NAME


CENTRE NUMBER


## CANDIDATE NUMBER



## MATHEMATICS

0842/02
Paper 2
October/November 2007
45 minutes
Candidates answer on the Question Paper.
Additional Materials:
Pen
Pencil

Protractor
Pencil
Calculator

## READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.
DO NOT WRITE IN ANY BARCODES.
Answer all questions.
The number of marks is given in brackets [ ] at the end of each question or part question.
You should show all your working in the booklet.

| For Examiner's Use |  |
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This document consists of 11 printed pages and 1 blank page.

1 (a) Calculate $\frac{1}{3}$ of 24 .
(b) Calculate $\frac{1}{6}$ of 24 .

2 Calculate 42\% of 60 .
[2]

3 Circle the 2 prime numbers in the box.

| 8 | 1 | 2 | 9 |
| :--- | :--- | :--- | :--- |
| 7 | 4 | 6 | 0 |

4 (a) Write $3 \frac{5}{9}$ as an improper fraction.
(b) Write $\frac{23}{6}$ as a mixed number.


5 (a) Farah has 17 cousins.
9 cousins are girls.
How many cousins are boys?
(b) Ramesh has 6 aunts and 9 uncles.

How many aunts and uncles does Ramesh have in total?
$\square$

6 One pack holds 3925 drawing pins.
Lena orders 6 packs of drawing pins.
How many drawing pins will Lena get in total?
Show your working.
$\square$

7 Hafiz writes this addition sum.

$$
5+13+21+2=41
$$

Hafiz wants to check that he is correct.
Write a different sum for Hafiz to check his answer.

8 Use brackets to make this calculation correct.

$$
7+3 \times 5-2=30
$$

9 (a) Lailee buys trousers and a shirt.


How much does she spend altogether?
$\qquad$
$\square$
(b) How much change does she get from a $\$ 10$ note?
$\square$
(c) Write how many of each coin Lailee should be given in her change.



10 Fong sits exams for Maths, English and Science.
His marks are as follows:

Maths 28 out of 35
English 18 out of 40
Science 36 out of 50
(a) Write Fong's English mark as a percentage.
$\square$
(b) Did Fong do better in Maths or Science?

Show your working.
[3]

11


The formula for calculating the area of a rectangle is

$$
A=L \times W
$$

Explain this formula in words.
$\square$

12 Jesse writes the eye colour and hair colour of the children in her class. She draws a Carroll diagram to show her results.

| Blue eyes | Not Blue <br> Eyes |  |
| :---: | :---: | :---: |
|  |  |  |
| Brown <br> Hair | 6 | 8 |
| Not <br> Brown <br> Hair | 4 | 5 |
|  |  |  |

How many children have hair that is not brown?

13 Ramesh enters a bicycle race.
He has to do 5 time trials before the real race.

Here are his results.

Trial 182 seconds
Trial 2174 seconds
Trial 3184 seconds
Trial 4186 seconds
Trial 5174 seconds
(a) What is his modal time?
(b) What is the range of his time trials?
$\square$
(c) What is his median time?
$\square$
(d) What is his mean time?

14


Which of these shapes is a regular pentagon?
$\square$

15 A bicycle shop hires out bicycles.
You have to pay $\$ 3$ for every hour plus a fixed amount of $\$ 5$.
Write a formula for the total hire cost using:
C for the total cost
h for the hours hired
$\qquad$
$\square$

16 Use the mirror lines to complete the pattern.

$\square$

17


Which shape below is a reflection of this shape?
A


$\square$

18 Salote cuts this square across the corners.
The arrow shows the direction she cuts.


This makes 2 right-angled triangles.


How big are the other angles in the triangles?


19

(a) Write the coordinates for A .
(a) Plot B at $(6,4)$

20 Label the dot at point $(-4,3)$ with a letter $X$.


21 (a)

Measure this line accurately.
(b)


Calculate the perimeter of this rectangle.
(c)


Calculate the area of this rectangle.

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