SECONDARY SCHOOL ANNUAL EXAMINATIONS 2007
Educational Assessment Unit - Education Division

## FORM 2 <br> MATHEMATICS - Scheme D <br> TIME: 30 minutes <br> (NON-CALCULATOR PAPER)

Question

Mark | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | TOTAL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

DO NOT WRITE ABOVE THIS LINE

Name: $\qquad$ Class: $\qquad$

## INSTRUCTIONS TO CANDIDATES

- Answer all questions.
- This paper carries 20 marks.
- Calculators and protractors are not allowed.

1. Fill in:

2. Paul wants to buy a game costing Lm12.50 and a CD costing Lm5. How much money does he need?

3. Which fraction below is NOT the same as $\frac{3}{5}$ ?
(A) $\frac{21}{35}$
(B) $\frac{6}{10}$
(C) $\frac{4}{6}$
(D) $\frac{30}{50}$
4. How many lines of symmetry does the shape have?

$\qquad$ lines
5. How many months are there in $\frac{1}{4}$ of a year?
$\qquad$ months
6. Round Lm3.71 to the nearest Lm.

$$
\mathrm{Lm}
$$

$\qquad$
7. Give the mean of the following numbers.
25
20
5
9
11
$\qquad$ (2 marks)
8. (a) $4 \times(2+5)=$ $\qquad$
(b) $(8 \div 2)-3=$ $\qquad$
9. The area of the rectangle is $35 \mathrm{~cm}^{2}$. One side is 5 cm . What is the length of the other side?

10. What is the value of the digit 5 in the number 23.56 ?
(five tens, five tenths, 5 units, five hundreds ) $\qquad$
(1 mark)
11. Work out :

$$
1.34 \mathrm{~m} \times 10=
$$

$\qquad$ m
12. Angle $x$ is about:
(a) $45^{\circ}$
(b) $80^{\circ}$
(c) $20^{\circ}$
(d) $140^{\circ}$

13. Write the multiples of $\mathbf{3}$ from the list below:

| 18 | 20 | 24 | 40 | 56 |
| :--- | :--- | :--- | :--- | :--- |

14. Write again, in order of size, starting with the smallest:

| 13 | 1.35 | 0.9 | 10.8 |
| :---: | :---: | :---: | :---: |


| 0.9 |  |  |  |
| :--- | :--- | :--- | :--- |

## END OF PAPER

SECONDARY SCHOOL ANNUAL EXAMINATIONS 2007
Educational Assessment Unit - Education Division

## FORM 2 <br> MATHEMATICS - Scheme D <br> TIME: 1h 30min (MAIN PAPER)

Question

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | Total <br> Main | Non- <br> Calc | Global <br> Mark |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Name: $\qquad$ Class: $\qquad$

- Answer all questions.
- This paper carries 80 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

1. Complete the shape so that the dotted line is the line of symmetry.

2. (a) Write the number three thousand four hundred and five in figures. $\qquad$
(b) Write the number 4056 in words.
3. Work out the following:
(a) $\frac{7.52 \times 3}{4}=$
(b) $2 \frac{7}{9}-\frac{2}{9}=$ $\qquad$
4. (a) Fill in with a letter. (A, B, C, D)
(i) Line $\qquad$ is slanting.
(ii) Lines $\qquad$ and $\qquad$ are parallel.
(iii) Line $\qquad$ is perpendicular to line $\qquad$ .

(b) Use a ruler to measure.

A
(iv) Line $\qquad$ is vertical.
(i) $\quad$ Line $\mathrm{A}=$ $\qquad$ cm
(ii) Line $\mathrm{C}=$ $\qquad$ mm
(c) Draw a straight line of length 10.5 cm .
(d) Draw a straight line of length 70 mm .
5. (a) Put these values correctly on the thermometer.

$$
\begin{array}{llll}
-20^{\circ} \mathrm{C} & 30^{\circ} \mathrm{C} & -10^{\circ} \mathrm{C} & 20^{\circ} \mathrm{C}
\end{array}
$$

(b) Circle the higher temperature in each case. The first one is done for you.
$20^{\circ} \mathrm{C}$ and $30^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C}$ and $0^{\circ} \mathrm{C}$
$-20^{\circ} \mathrm{C}$ and $-10^{\circ} \mathrm{C}$

6. (a) Shade $\frac{3}{4}$ of the squares.
(b) What is $\frac{3}{4}$ of Lm64?

Lm $\qquad$

(c) Write $\frac{3}{4}$ as a decimal.
(d) Put the fractions in order, largest first.
$\frac{1}{8} \quad \frac{3}{4}$
$\frac{1}{2}$
$\frac{1}{1}$
7. These shapes are made of sticks.

(a) Draw the $4^{\text {th }}$ shape in the pattern.

(b) Without drawing, complete the table.

|  | $\mathbf{1}^{\text {st }}$ <br> shape | $\mathbf{2}^{\text {nd }}$ <br> shape | $3^{\text {rd }}$ <br> shape | $\mathbf{4}^{\text {th }}$ <br> shape | $5^{\text {th }}$ <br> shape | $\mathbf{6}^{\text {th }}$ <br> shape |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number <br> of sticks | 9 |  |  |  |  |  | $\mathbf{9}^{\text {th }}$ shape |

8. Write the probability of choosing a $\bigvee$ from the shapes below.


$$
x=
$$

(b) Complete:
angle $p+$ angle $q=$ $\qquad$ .
$\left(90^{\circ}, 100^{\circ}, 180^{\circ}, 360^{\circ}\right)$

(c) Without measuring, find the size of $y$.

$$
y=
$$


(d) (i) Draw triangle ABC using ruler and protractor.

(ii) Measure side AC.
$\mathrm{AC}=$ $\qquad$ cm
10. (a) Tick the correct time.

| Six o' clock |  |
| :--- | :--- |
| Quarter to six |  |
| Half past nine |  |
| Quarter past six |  |


(b) Write, in figures, the time shown on the clock face.

(c) Write $5.00 \mathrm{p} . \mathrm{m}$. using 24-hour time.

(d) Look at the calendar to answer the questions below.


| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 2 | 3 | $\mathbf{4}$ |
| 5 | 6 | 7 | 8 | 9 | 10 | $\mathbf{1 1}$ |
| 12 | 13 | 14 | 15 | 16 | 17 | $\mathbf{1 8}$ |
| $\mathbf{1 9}$ | 20 | 21 | 22 | 23 | 24 | $\mathbf{2 5}$ |
| 26 | 27 | 28 | 29 | 30 | 31 |  |

(i) St Joseph's feast is held on the $19^{\text {th }}$ March.

What day of the week was it? $\qquad$
(ii) What was the date of the last Friday in March? $\qquad$ .
(iii) What day of the week was the last day of February? $\qquad$
11.


Use the function machine to complete the table below.

| Input <br> $x$ | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| Output <br> $y$ | 8 |  | 12 |  |

12. (a) Mark wants to draw the diagram using LOGO. (The lines are of equal lengths.) Fill in his last two commands. (The turtle is at the starting point.)

## PD FD 50 RT 90 FD 50

$\qquad$

(b) Anna writes the following commands in Logo.

## PD BK 200 RT 90 FD 100

Draw her shape, starting from the turtle.
13. (a) The shape shown is a
(square, triangle, rectangle, cube)
(b) Draw 6 more similar shapes to show that it tessellates.

14．The tuck shop sold drinks between 12：30 and 13：10．
The pictogram shows the drinks sold every 10 minutes during break．


| $\begin{aligned} & 12: 30- \\ & 12: 40 \end{aligned}$ | B | B | 3 | B | B | B | B | 3 | E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 12: 40- \\ & 12: 50 \end{aligned}$ | B | 3 | 家 | 淾 | 3 | 感 | B | 家 |  |
| $\begin{aligned} & 12: 50- \\ & 13: 00 \end{aligned}$ | 㬉 | 㬉 | 是 | 家 | 家 |  |  |  |  |
| $\begin{aligned} & 13: 00- \\ & 13: 10 \end{aligned}$ | 3 | 定 | B | E |  |  |  |  |  |

（a）What does the symbol mean？
（b）How many drinks were sold between 12：40 and 12：50？ $\qquad$ drinks
（c）During which 10 minutes were most drinks sold？
Between $\qquad$ and $\qquad$ .
（d）How many more drinks were sold during the third 10 minutes than the last 10 minutes？
$\qquad$ drinks．
15.

(a) The co-ordinates of point B are ( $\qquad$ , $\qquad$ ).
(b) Plot and label point $\mathrm{D}(6,8)$.
(c) Join C to D to A to form a shape.

The shape $A B C D$ is a $\qquad$ (rectangle, square, rhombus, kite)
(d) Translate the shape ABCD $\binom{5$ left }{4 down }

