SECONDARY SCHOOL ANNUAL EXAMINATIONS 2007
Education Assessment Unit - Education Division
FORM 3
MATHEMATICS - Scheme D
Time 30 minutes
(NON-CALCULATOR PAPER)

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

Mark

## INSTRUCTIONS TO CANDIDATES

- Answer all questions. There are 10 questions.
- This paper carries 30 marks.
- Calculators and protractors are not allowed.

1. Write in figures: Two hundred and seven.

Ans $\qquad$ .
2. From the set $\{7,9,10,12,15\}$ write:
(a) The prime number $\longrightarrow \square$
(b) The square number $\longrightarrow$ $\square$
3. Simplify: $\frac{5}{25}=\frac{\square}{\square}$
4. Work out:

$$
860 \div 4=\square
$$

5. (a) The cube has $\qquad$ vertices.

(b) The cylinder has $\qquad$ edges.

(c) The cone has $\qquad$ faces.

6. What is the probability of choosing a black disc?

7. Work out the following:
(a) $27 \cdot 65+8 \cdot 92$
(b) $6000-1369$
(c) $5 \times 4 \div(8-6)=$ $\qquad$
8. Use arrows to match.

$$
\begin{array}{cc}
0.16 \times 10 & 16 \\
16 \times 100 & 160 \\
1600 \div 100 & 1600
\end{array}
$$

9. Arrange in order, smallest first:
(a) $6,0,-7,5$.

Ans $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$ .
(b) $\quad 1 \cdot 25,2 \cdot 5,1 \cdot 5,0 \cdot 5 . \quad$ Ans $\qquad$ , $\qquad$ , $\qquad$ .
10.

(a) Find the range of these numbers. Ans $\qquad$
(b) Find the mean of these numbers. Ans $\qquad$

FORM 3
MATHEMATICS - Scheme D
Time: 1 h 30 min (MAIN PAPER)

| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Non <br> Calc | Main | Total |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Mark |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Calculators are allowed but all necessary

 working must be shown.Name $\qquad$ Class $\qquad$

1. (a) Write $0 \cdot 75$ as a percentage $\qquad$ \%.
(b) Write $\frac{1}{4}$ as a percentage $\qquad$ \%.
(c) Find $10 \%$ of 125 m .

Ans $\qquad$ m.
(d) Express Lm8 as a percentage of Lm40.

Ans $\qquad$ \%.
(e) Draw $X$ on this line to divide it in the ratio $2: 5$.
2. Jill bought 6 apples for 48 c.


(a) Find the cost of one apple.


Ans $\qquad$ C
(b) Find the cost of 5 apples.


Ans $\qquad$ c
3. (a) Complete this sequence
$2,5,8,11$ $\qquad$ , $\qquad$ .
$1 s t$
2 nd
3 rd
$4^{\text {th }}$
$5^{\text {th }}$
6 th
(b) The $1^{\text {st }}$ term is $\qquad$ .
(c) The difference between the $1^{\text {st }}$ term and the $2^{\text {nd }}$ term is $\qquad$ .
(d) The $8^{\text {th }}$ term is $\qquad$ .
D
4. (a) If $y=10$, find the value of:

$$
3 y-5
$$

## Ans

(b) Solve the equation:

$$
7+a=20
$$

Ans $a=$ $\qquad$
(c) Simplify:

$$
2 q+8 p+4 q-3 p
$$

## Ans

5. (a) Calculate the perimeter of this Rhombus.

Ans $\qquad$ cm

(i) Calculate the length of rectangle $R$. $\qquad$ cm.
(ii) Calculate the area of rectangle $R$. $\qquad$ $\mathrm{cm}^{2}$.
(iii) Calculate the area of square $S$. $\qquad$ $\mathrm{cm}^{2}$.
(iv) Calculate the area of the whole shape. $\qquad$ $\mathrm{cm}^{2}$
6. (a) Draw the lines of symmetry.

(b) Complete this shape so that the dotted line is the line of symmetry.

7. This is Paul's school timetable:

|  | $08: 30-09: 15$ | $09: 15-10: 00$ | break | $10: 30-11: 15$ | $11: 15-12: 00$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Monday | Social Studies | Maltese |  | Mathematics | English |
| Tuesday | English | Religion |  | Italian | Mathematics |
| Wednesday | Maltese | English |  | Italian | PE |
| Thursday | Maltese | Italian |  | English | Mathematics |
| Friday | Mathematics | Maltese |  | Mathematics | History |

(a) On Monday, Mathematics starts at $\qquad$ .
(b) On which day is the PE lesson? $\qquad$ .
(c) Which subject does Paul have three times a week? $\qquad$ .
(d) How long is the break? $\qquad$ minutes.
(e) How many Maltese lessons does Paul have in a week? $\qquad$ .
(f) Show on this clock face the time when Religion starts.

8. (a) Find a.


Ans $a=$ $\qquad$
(b) Use you ruler and protractor to construct triangle ABC .

(c) Measure $A B . \quad$ Ans $A B=$ $\qquad$ cm.
9. (a) Write 78 correct to the nearest 10. $\qquad$
(b) What is the value of $\mathbf{4}$ in the number 2456 .

Ans $\qquad$ .
(c) Work out: $-9+3=$ $\qquad$ .
(d) Use your calculator to find: $28 \cdot 3 \div 11$

Give the answer correct to 1 decimal place.
Ans $\qquad$ .
10. A class of students made a list of their pets.

| dog | cat | bird | cat | dog |
| :---: | :---: | :---: | :---: | :---: |
| cat | dog | fish | dog | fish |
| dog | fish | dog | bird | cat |
| cat | bird | cat | dog | bird |

(a) Complete this frequency table.
(b) Complete this bar chart.

| Pet | Frequency |
| :---: | :---: |
| dog |  |
| cat |  |
| fish |  |
| bird |  |

(c) How many pets do they have in all? Ans $\qquad$ pets
(d) Which is the least popular pet?

Ans $\qquad$ .

(e) There are $\qquad$ more dogs than birds.

