DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department for Curriculum Management and eLearning Educational Assessment Unit
Annual Examinations for Secondary Schools 2011

FORM 2 MATHEMATICS SCHEME D

TIME: 30 minutes Non Calculator Paper

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

| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
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## Instructions to Candidates

- Answer ALL questions.
- This paper carries a total of 25 marks.
- Calculators and protractors are NOT ALLOWED.

1. Evaluate:
a) $136.182 \times 100=$ $\qquad$
b) $58 \div 2=$ $\qquad$
2. John has 26 sweets. He eats 8 sweets. How many sweets has he now ?

sweets
(2 marks)
3. This themometer shows the temperature.

Fill in the blanks using these numbers.

$20^{\circ} \mathrm{C} \quad-10^{\circ} \mathrm{C} \quad 35^{\circ} \mathrm{C}$
4. Fill in the missing numbers :
a) $5+\square=10$
b) $13+\square=20$
c) $\square+80=100$
(3 marks)
5. This fuel tank holds 40 litres of petrol when full.
a) What fraction of the tank is full ?
 Circle the correct fraction.

$$
\left(\frac{1}{3}, \frac{1}{4}, \frac{1}{2}\right)
$$

b) How many litres of petrol are there in the tank?
6. Mark the following as TRUE or FALSE.
a) 84 is a n even number
b) 100-40 is less than 55
c) $50 \%>\frac{4}{8}$ $\qquad$
(3 marks)


A recipe for $\mathbf{2}$ persons uses 225 g of flour.
A recipe for $\mathbf{4}$ persons uses $\quad \mathrm{g}$ of flour.
(2 marks)
8. Work out
a) $(2+3) \times(7-4)=$ $\qquad$
b) $18-(2 \times 4)=$ $\qquad$
(4 marks)
9. A pizza is divided into 8 pieces.
a) J ake eats $\frac{3}{8}$ of the pizza.

Shade the number of pieces that Jake eats.

b) J ake eats a nother $\frac{1}{8}$ of the pizza.

What fraction of the pizza does he eat in all?
Give your a nswer in its simplest form :

$$
\frac{3}{8}+\frac{1}{8}=
$$

(3 marks)

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MATHEMATICS SCHEME D
Main Paper


DO NOT WRITE ABOVE THIS LINE

Name $\qquad$ Class $\qquad$

CALCULATORS ARE ALLOWED BUT ALL NECESSARY WORKING MUST BE SHOWN. ANSWER ALL QUESTIONS.

1. Fill in the blanks using the following words:

| sixty | thousand | six |
| :--- | :--- | :--- |

$8665=$ Eight $\qquad$
$\qquad$ hundred and $\qquad$ -five
(2 marks)


The LOGO turtle is facing North.
Luke types RT90.
Which direction will the turtle now face?
(1 mark)
3. Luke shades $\frac{3}{5}$ of Shape 1 .

Shape 1
a) How many squares does he shade to shade $\frac{3}{5}$ of Shape 2 ?

squares
b) Fill in the blanks

$$
\frac{3}{5}=\frac{\square}{15}
$$

(2 marks)
4. Fill in the missing numbers in the following number machines.
a)

b)

5.


Shape 5
Shape 6
a) Draw the next two shapes.
b) Complete the table of the numbers of squares in each shape :

| Shape Number | 1 | 2 | 3 | 4 | 5 | 6 |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of Squares | 1 | 3 | 5 | 7 |  |  |

(4 marks)
$\qquad$
$\qquad$
6. Emma buys these objects from the shop.

a) Put these prices in order, sma llest first.

$€$

b) Round each price correct to the nearest $€$.

c) How much does Emma spend at the shop?
d) Emma has $€ 10$. What change does she get?

## $€$

(9 marks)
7. The letters of the word CHOCOLATE are put in a bag.
c) $\mathbf{H}$
0
c
0

A $T$
E

Alan picksa letteratrandom.
On the probability scale, mark with a cross $\times$ the probability that Alan chooses the letter B.

## Impossible


(2 marks)
8. Julie is on the $3^{\text {rd }}$ floor.

She wants to go down 4 floors.

Shade the button of the lift that she presses.


1

$-1$
(2 marks)

9. Fill in the blanks with $<$ or $>$ or $=$
a)


b)

115 cm
$3 \times 40 c$

1.15 m

$\square$
€1.30
(5 marks)

Name: $\qquad$ Class: $\qquad$
10. a) Match the correct word to each drawing.

The first one is done for you.

b) Use your protractor and measure the obtuse angle. Finish the sentence.

The obtuse angle is $\qquad$ $\stackrel{\circ}{\circ}$
(4 marks)


## SUNRISE 6.20a.m. <br> SUNSET 8.15 p.m.

a) Draw the hands on the clock to show the time when the sun rises.

b) Write the sunset time in 24 -hour clock.
13. a) The year 2012 is a IEAP YEAR
(i) In 2012 the month of February has $\qquad$ days.
(ii) A leap year happens every 4 years.

Work out the next leap years.
2012, 2016,
$\qquad$ , $\qquad$ .
b) These are the Expiry dates on 3 packets of bisc uits.

Shade the packet that must be used first.

| BEST BEFORE |
| :--- |
| $12 / 09 / 12$ |


| BEST BEFORE |
| :---: |
| $24 / 02 / 12$ |

BEST BEFORE
$02 / 11 / 12$
(4 marks)
14. Lisa asks students a bout which ice-cream fla vour they like best. The diagram shows their answers.

| Vanilla |  |
| :---: | :---: |
| Chocolate |  |
| Strawbery |  |
| Banana |  |


a) How many students like strawbery flavoured ice-cream best?
b) Which is the least favourite ice-cream flavour? $\qquad$
c) Which ice-cream fla vour do students prefer most? $\qquad$
d) How many students answer Lisa's question? $\qquad$
(5 marks)
15.


Fill in the blanks.
a) $X^{\circ}+50^{\circ}=$ $\qquad$
b) $X^{\circ}=$ $\qquad$ - $50^{\circ}$
c) $X^{\circ}=$ $\qquad$
(3 marks)
16. The following instructions will help you find the hidden treasure. Read the instructions and then answer the questions below.


a) Plot your sta rting point, $\mathbf{A}(2,1)$, on the graph.
b) Give the coordinates of the palm tree, at point $\mathbf{B}$.

c) Mark point C on the graph.
d) Give the coordinates of the treasure at point $\mathbf{C}$. $\qquad$ , $\qquad$ )
e) Join point $A$ to point $B$, point $B$ to point $C$ and point $C$ to point $A$ to form triangle $\mathbf{A B C}$.
17.a) Fill in the correct name inside each shape.

The first one is done for you.

b) Underline the correct word.

A (square, rectangle, triangle, circle) is made up of a curved line.
A triangle has ( $0,3,4$ ) vertices.
A (square, rectangle, triangle, circle) has 4 equal sides.
c) (i) Use you ruler to measure the three sides of this shape.

(ii) Work out the Perimeter of this sha pe.

$$
\text { Per }=
$$

$\qquad$
d)


The area of this shape is
$\qquad$
(12 marks)
18. a) (i) Complete this shape so that the dotted line is a line of symmetry.

(ii) The letter H has rotational symmetry of order $\qquad$ .
b) A LOGO turtle follows these commands.

$$
\begin{array}{lllllll}
\text { PD } & \text { FD } 60 & \text { RT90 } & \text { FD } 100 & \text { LT90 } & \text { FD } 30
\end{array}
$$

Draw a diagram to show the turtle's trip.
(5 marks)

