SECONDARY SCHOOL
ANNUAL EXAMINATIONS 2008
DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Educational Assessment Unit

C

| **FORM 2** | **MATHEMATICS – SCHEME C** | **TIME: 45 minutes** |

(NON-CALCULATOR PAPER)

Question	1	2	3	4	5	6	7	8	9	10	11	12	Total
Mark													

DO NOT WRITE ABOVE THIS LINE

Name: _____   **Class:** _____

INSTRUCTIONS TO CANDIDATES

- **Answer ALL questions.**

- **This paper carries a total of 40 marks.**

- **Calculators and protractors are NOT ALLOWED.**

1 a) Work out**:** i) $72 . 31 +$
                            $\underline{18 . 62}$

                            $\underline{\qquad}$

   ii) $172 . 37 -$
        $\underline{11 . 62}$

        $\underline{\qquad}$

   b) Round your answer to (i) correct to the nearest 10.   _____

   c) Round your answer to (ii) correct to the nearest 100.   _____

                                                                     (4 marks)

2   Evaluate : a) 84.12×10

                                                                     _____

    b) $48.21 \div 100$

                                                                     _____

    c) $(98.41 - 36.4) \div 10$

                                                                     _____

                                                                     (4 marks)

3   Evaluate the following, giving your answer in its simplest form:

    a) $2/5 + 1/5$ $=$ _____

    b) $1/10 + 3/10$ $=$

                                                                     _____

    c) $24 \times \frac{1}{4}$ $=$

                                                                     _____

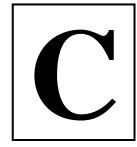   (4 marks)

4   On a certain day, the temperature in Malta was 20°C, while that in Moscow was 25° colder. What was the temperature in Moscow?

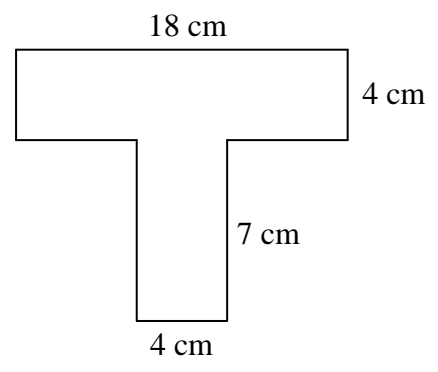   _____$^{\circ}$C

                                                                     (1 mark)

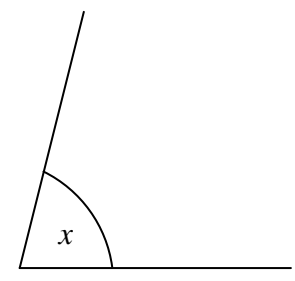5 If $z = 3x - 2y$, find the value of z when $x = 4$ and $y = 5$.

_____

(3 marks)

6 Find the area of the shape shown.

18 cm

4 cm

7 cm

4 cm

(4 marks)

7. The angle marked x is approximately equal to _____

5°   40°   80°   100°

x

(1 mark)

8. Solve the following equations:

a) $7 + x = 9$

$x =$ _____

b) $3y = 27$

$y =$ _____

c) $\dfrac{z}{10} = 3$

$z =$ _____

(3 marks)

9 a) How many small squares are there
    in the big rectangle?

_____

b) Shade in 76% of these squares.

(4 marks)

10 What is the value of the angle marked x?

$x=$_____$^{\circ}$

(4 marks)

11 a) What is the value of 2^6 ?   _____

    b) What is the value of 6^2 ?   _____

    c) What is the value of $2^6 + 6^2$?

                                                        _____

                                                        (4 marks)

12 Five bars of chocolate cost €1.15.
    a) How much does 1 bar of chocolate cost?

                                                        €_____
    b) How much do 7 bars cost?

                                                        €_____
                                                        (4 marks)

End of Paper

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C

FORM 2   **MATHEMATICS – SCHEME C (Main Paper)**   **Time: 1h 15min**

Question	1	2	3	4	5	6	7	8	9	10	11	12	Total Main	Non Calculator	**Global Mark**
Mark															

DO NOT WRITE ABOVE THIS LINE

Name: _____   **Class:** _____

- Answer all questions.
- This paper carries 60 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

_____

1 a) Use your calculator to find the value of 88.33×36.05.   _____

   b) Divide your answer to (a) by 263.165.   _____

   c) Multiply the answer to (b) by itself.   _____

   d) Round your answer to (c) correct to the nearest whole number.   _____

(4 marks)
_____

2 Five names are put in a hat; one name is chosen at random. The names are Tom, Ann, Paul, Andrew and Rose.

   a) What is the probability that the name Paul will be chosen?   _____

   b) What is the probability that the name chosen will be that of a girl?   _____

(4 marks)
_____

3 Divide €230 between Arnold and Mary in the ratio 2:3.

Arnold € _____

Mary € _____

(5 marks)
_____

4 These are Dominic's annual marks:

70   44   82   51   74   58   75   50   81

Work out:
a) the average mark

b) the median mark.

_____

_____

5   a) On the grid provided plot the following points:
        A (0 , 2)   B (2 , 2)   C (2 , 7)
        D (3 , 7)   E (0 , 10)
      Join A to B , B to C, C to D, D to E.
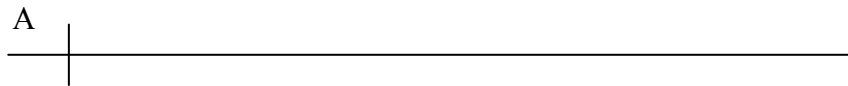   b) Use the *y* axis as a mirror line and draw the image of the shape you have
drawn.
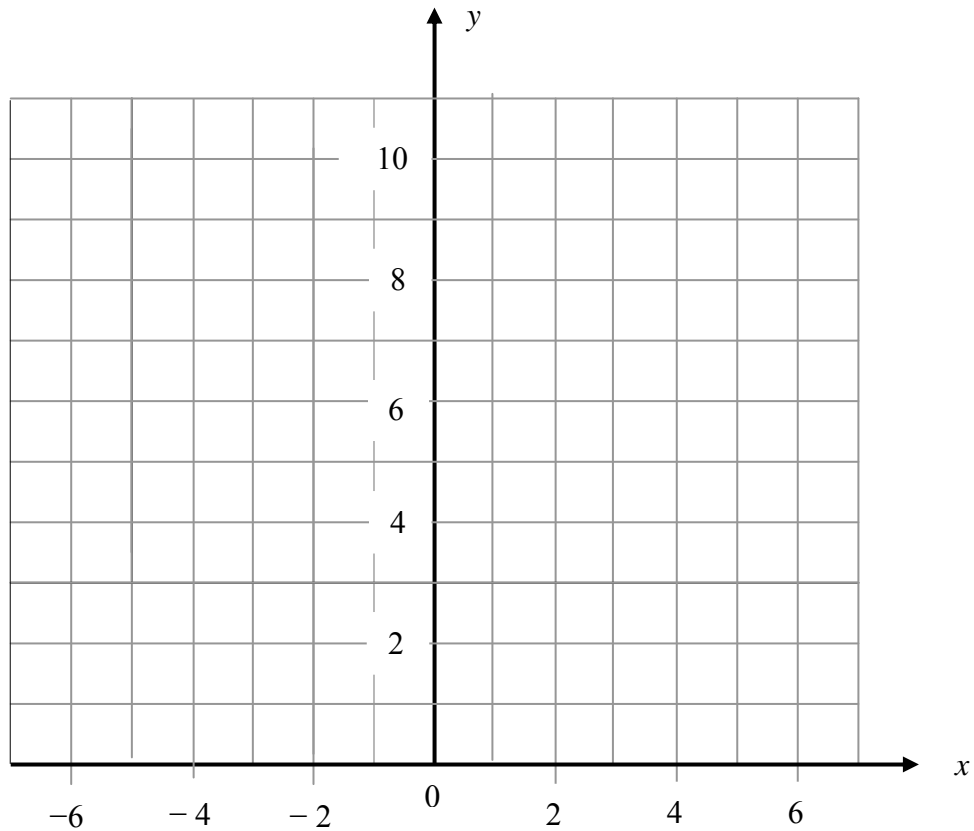
(8 marks)
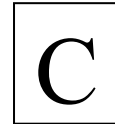
6 In this question you may only use a ruler, protractor and compasses.
On the given line mark point B such that AB = 10 cm.
At A draw line AC such that ∠ BAC = 50º and AC = 8 cm.
Join B to C. Measure the length of BC.

BC = _____cm

A
|_____

(5 marks)

7 The diagram shows a rectangular box measuring 120 cm long, 50 cm wide,
45.8 cm high. Calculate:

a)   the area of the largest face

45.8 cm

_____cm^2

50 cm

120 cm
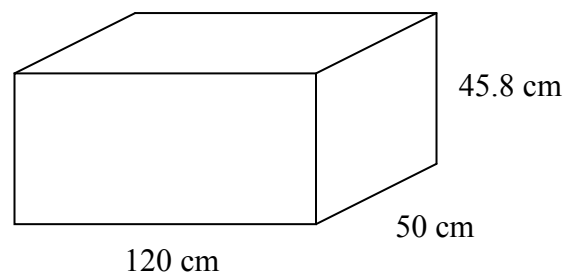
b)   the area of the smallest face

_____cm^2

c)   the volume of the box.

_____cm^3

(5 marks)

8   Rita used a spreadsheet to work out a bill.

	A	B	C	D
1	Quantity	Description	Unit Price (€)	Price (€)
2	2	Packets Butter	3.12	6.24
3	4	Cartons milk	1.68	
4	3	Packets cat food		3.57
5			**Total**	

a) Which one of the following formulae did Rita type in cell D2?
    = A3×C2;   = C2/A2;   = C2*A2.   =_____

b) Write down the correct values in cells D3, C4, and the total in cell D5.
                                                                    (4 marks)

9   James was trying to draw the triangle shown using Logo.
    Fill in the blanks with the appropriate commands so that James will get the
    triangle he wants.

                                80 ts

                                          37°

            60 ts
                                100 ts
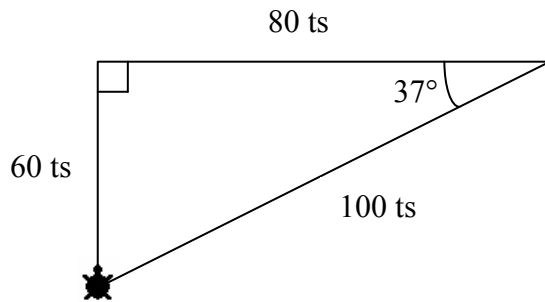
    PD FD 60   RT _____ FD _____ _____143 FD _____

                                                                    (4 marks)

10 In ΔABC, calculate:
    a) ∠CBA and
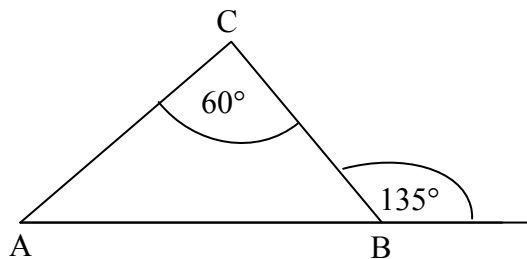
        ∠CBA = _____ °

    b) ∠ BAC.
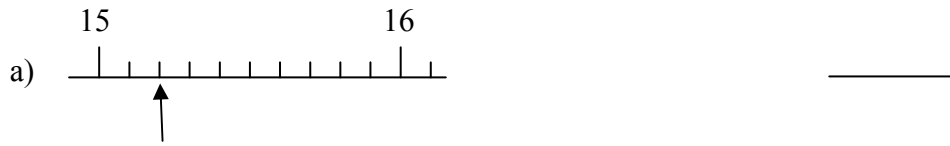
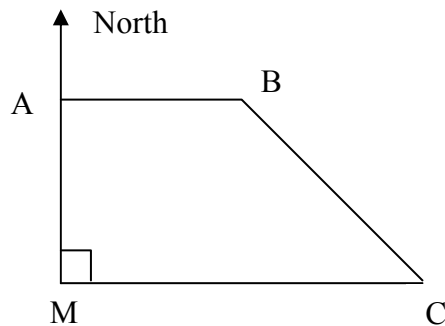   ∠BAC =_____ °

                                                                    (4 marks)

11 What number is the arrow pointing at on each of the following scales?

a) 15   16

___

b) 10   11

___

c) 7   8

___

(6 marks)

12 The diagram shows the flight path
of an aeroplane which took off from
Malta (M) and flew North to point
A. It then turned right 90° and
continued to B. At B it turned right
another 45° and flew to C.

a) Write down in **words** the direction
of the aeroplane from
i) A to B

___

ii) B to C

___

b) ∠ AMC = 90°. What is the **3 figure** bearing of M from C?   _____ °

(5 marks)

End of Paper