SECONDARY SCHOOL ANNUAL EXAMINATIONS 2010
Directorate for Quality and Standards in Education
Educational Assessment Unit

D

FORM 2   **MATHEMATICS SCHEME C**   **TIME: 30 minutes**
Non-Calculator Paper

Name: _____   **Class:** _____

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

Instructions to Candidates

Answer all questions.
This paper carries a total of 25 marks.
Calculators and protractors are not allowed.

1. Work out the following:

   a) 25 + 31   =

   _____

   b) 27 – 14   =

   _____

   c) 220 + 104   =

   _____

   (3 marks)

2 Complete:

   a)   34 + ☐ = 80

   b)   78 – ☐ = 51

   (2 marks)

3 Arrange these numbers in ascending order (smallest first):

   23,   2.93,   18,   20.9

   _____   _____   _____   _____

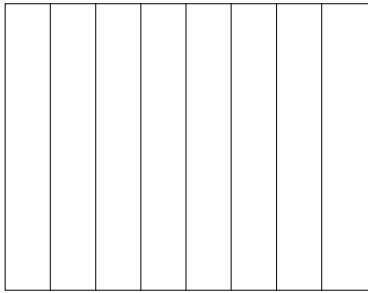   (2 marks)

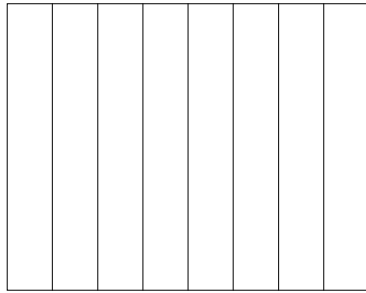4 How many degrees are there in 1 right angle?
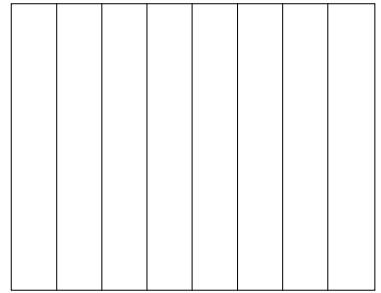
   °
   _____

   (1 mark)

5 **Shade** in the amount shown under each rectangle:

$$\frac{1}{8}$$

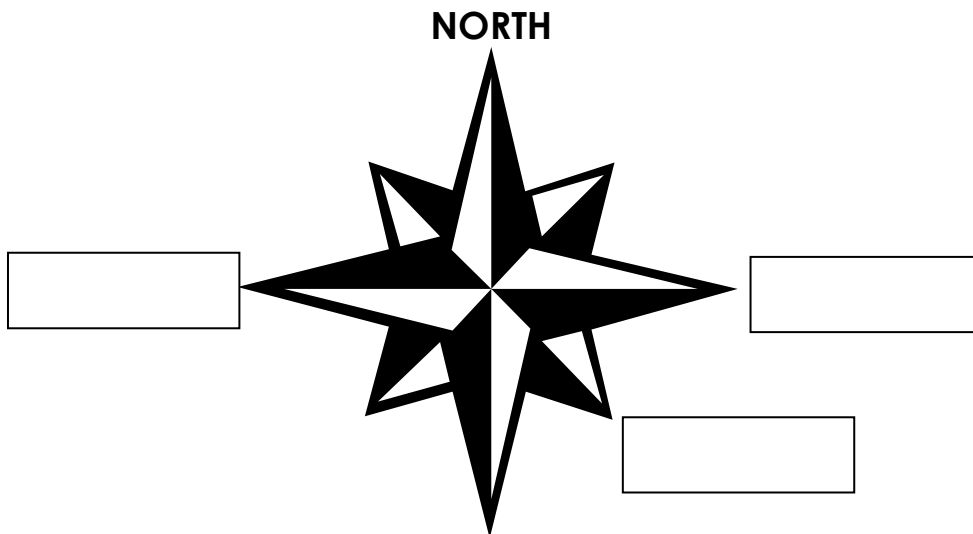$$\frac{3}{4}$$

25%

(4 marks)

6 Fill in the boxes below by choosing the correct word from:

East (E)   **West** (W)   **South-east** (SE)
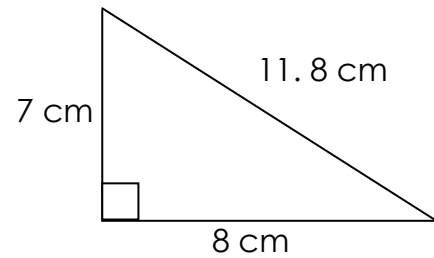
NORTH

(3 marks)

7   Work out the mean (average) of these numbers:

7,   10,   9,   6

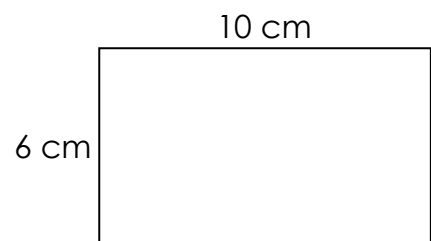(2 marks)

8   Calculate the perimeter of this triangle.

11.8 cm

7 cm

8 cm

Perimeter = _____cm

(2 marks)

9   Calculate the area of this rectangle.

10 cm

6 cm

Area = _____cm^2

(2 marks)

10   Complete:

a)   13,   16,   _____,   22,   _____.

b)   10,   8,   _____,   4,   2,   _____,   −2.

(4 marks)

End of Paper

SECONDARY SCHOOL ANNUAL EXAMINATIONS 2010
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D

FORM 2   **MATHEMATICS SCHEME D**   **TIME: 1h 30min**
Main Paper

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Main	Non Calculator	**Global Mark**
Mark																

DO NOT WRITE ABOVE THIS LINE

Name: _____   **Class:** _____

- Answer all questions.
- This paper carries 75 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.
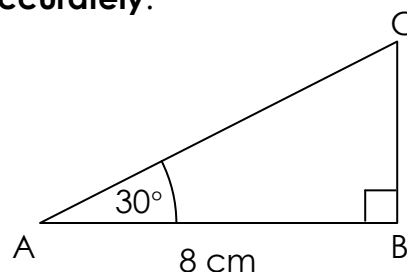
1   Use your calculator to work out :

a) 197.4 + 152.6   =

_____

b)   9 + 8.5   =

_____

c) 290 ÷ 20   =

_____

(3 marks)

2   Use a ruler and a protractor to draw triangle ABC **accurately**.
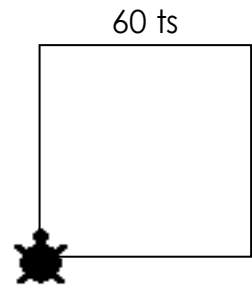Measure the length of AC.

C

30°

A   8 cm   B

AC = _____cm

(5 marks)

3   The turtle draws a square of side 60 turtle steps (ts).

60 ts

a) What is the total distance travelled by the turtle?
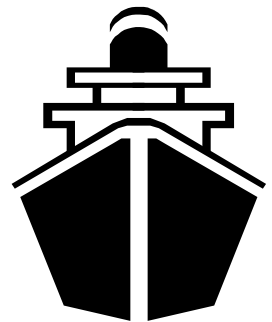
_____ts

b) Fill in the blanks to draw the square:

PD   Repeat _____ [FD _____ RT _____]

(5 marks)

4   The Gozo ferry leaves Gozo at 9 o'clock at night.
The trip to Ċirkewwa takes 25 minutes.
Answer the following questions by underlining the
correct answer:

a) The ferry leaves Gozo at (9 a.m.,   6:09 p.m.,   9 p.m.)

b) The ferry arrives at Ċirkewwa at (9:25 a.m., 6:34 p.m., 9:25 p.m.)

c) On the 24-hour clock, we write 9 o'clock at night as   (0900 ;   2100 ;   3300)

(4 marks)

5   Draw a circle centre A, with radius 3.5 cm.
On your circle, draw and mark a radius and a diameter.
Measure the length of the diameter.

+ A

diameter = _____cm

(5 marks)

6   On the grid below **plot** and **label** the following points:
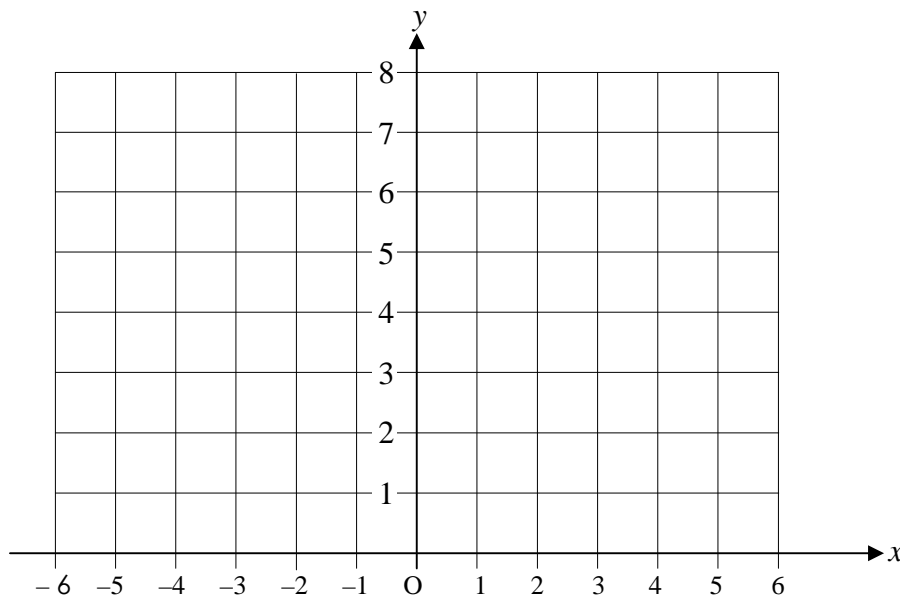
A (0, 1)   B (3, 1)   C (5, 4)   D (0, 7)

Join A to B, B to C, and C to D.

Use the *y* axis as the mirror line and draw the **image** of shape ABCD.

(8 marks)

_____

7   John wants to buy a football which is marked €20. His father pays 10% of the price. John pays the rest.
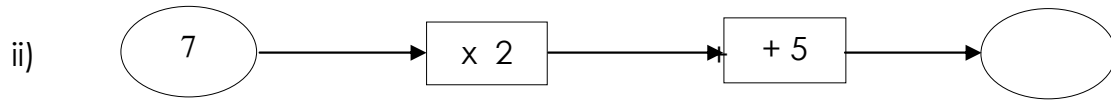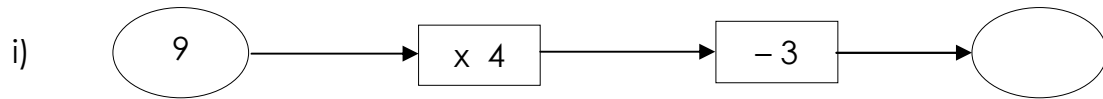
a) What is 10% of €20?

€ _____

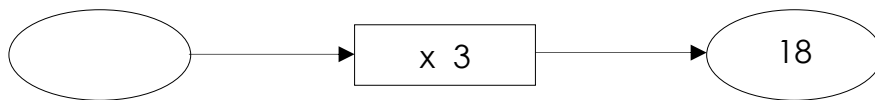b) How much does John pay for the football himself?

€ _____

(4 marks)

8   a) Work out the output of these number machines:

i)   (9) → [x 4] → [− 3] → ( )

ii)   (7) → [x 2] → [+ 5] → ( )

b) Work out the **input** of this number machine:

( ) → [x 3] → (18)

(6 marks)

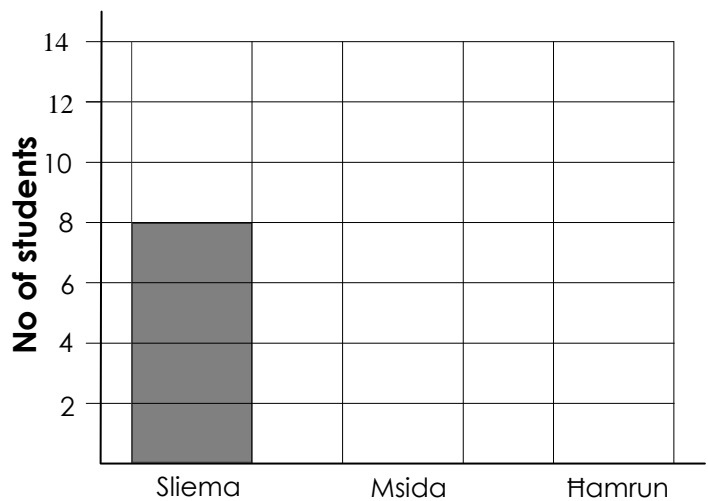9   In a class of 24 students, half of them live in Ħamrun, 8 live in Sliema and the others live in Msida.

a) How many students live in Ħamrun?

_____students

b) How many students live in Msida?

_____students
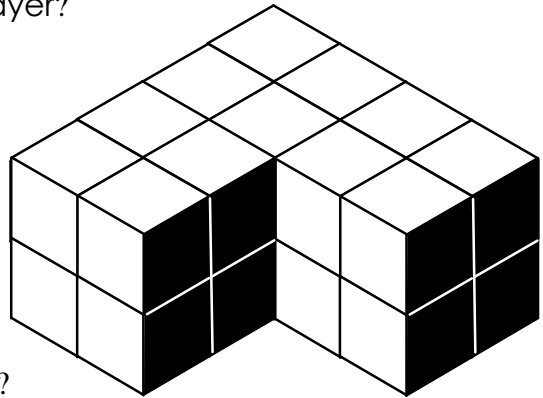
c) Use this information to fill in the bar chart.

(7 marks)

10 John was using some cubes to build the solid shown. All the cubes were exactly the same. Each cube was 1cm long, 1cm wide and 1cm high, and there were 2 layers of cubes.

a) How many cubes were there in each layer?

_____ cubes
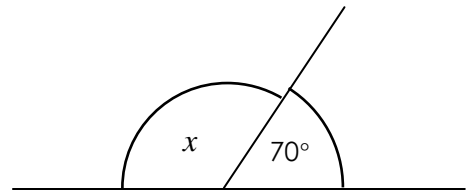
b) What was the **total volume** of the solid?

_____ cm³

(5 marks)

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11 Fill in the blanks:

a) $x + 70° = $ _____ $^\circ$

         $x = $ _____ $^\circ$

x $70°$

b) In triangle ABC

    $c + 83° + 42° = $ _____ $^\circ$

    $c + $ _____ $^\circ$ $= $ _____ $^\circ$

    $c = $ _____ $^\circ$

C

c

$83°$ $42°$

A   B
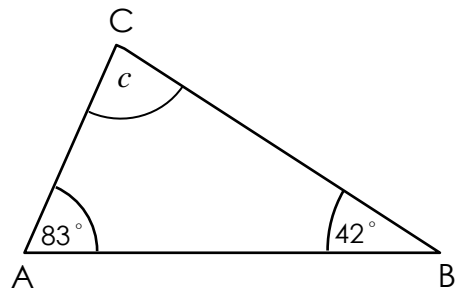
(8 marks)

. 12   a) Work out this bill:

3 cartons milk   at €0.85 each   € _____

2 packets cat food   at €1.52 each   € _____

6 kg potatoes   at €0.75 per kg   € _____

[   ] bottles water   at € 0.70 each   € 1 . 4 0
                                                       _____

                                          TOTAL   € _____
                                                       _____

b) How many **bottles of water** did I buy?

_____ bottles

c) How much change do I get from €20?

€ _____

(12 marks)

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13   Fill in with: likely,   certain,   impossible

a) I draw a square having only **three** sides.   _____

b) Malta is larger than Gozo.   _____

c) If I do not study, I will fail my exam.   _____

(3 marks)