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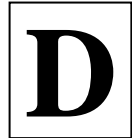DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Educational Assessment Unit

D

| **FORM 4** | **MATHEMATICS – Non-calculator Paper – Scheme D** | | | | | | | | | | **Time: 20 min** | | | |

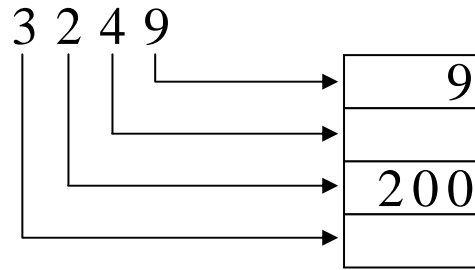| Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
Mark															

DO NOT WRITE ABOVE THIS LINE

Name: _____   Class: _____

INSTRUCTIONS TO CANDIDATES

- **Answer ALL questions.**

- **This paper carries a total of 20 marks.**

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

1. Write down the values of the digits **3** and **4** as in the examples.

$$3\ 2\ 4\ 9$$

	9
	200

(2 marks)

2. Write in order of size **largest first**.

3·7   3·07   0·37   30·7
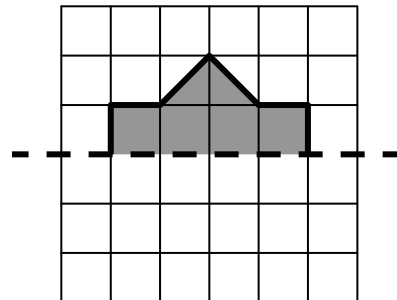
_____   _____   _____   _____

(2 marks)

3. Write in **figures**:

Sixty-two thousand four hundred and eighteen: _____

(1 mark)

4. The broken line represents the mirror line.
   Draw the **reflection** of the shaded shape.

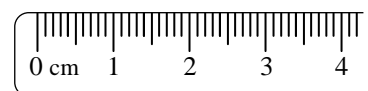(1 mark)

5. Subtract:

$$€5000$$
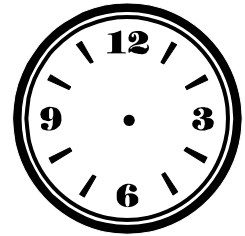$$-\ €1872$$
_____

(1 mark)

6. a)

The arrow is pointing at _____ cm

b) Mark 0·9 cm on the ruler.

(2 marks)

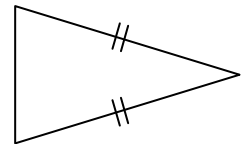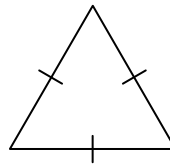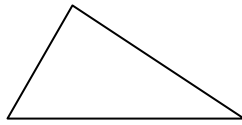7. Draw the hour and the minute hands on the clock to show 20:25.

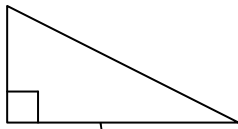
(2 marks)

8. Make **equivalent** fractions.

$$\frac{2}{3} = \frac{}{21}$$

(1 mark)

9. Join each triangle to its correct name.

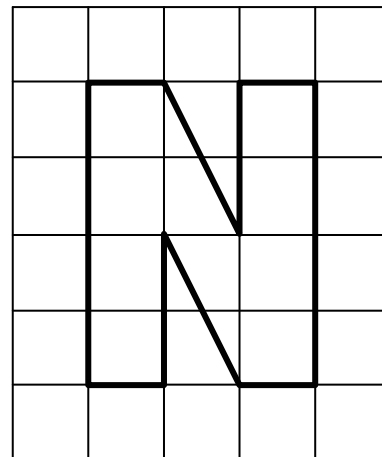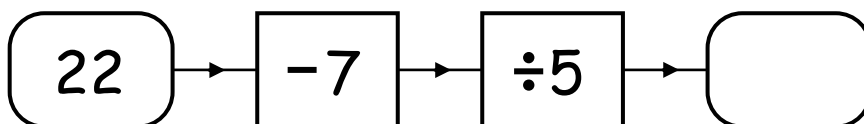| Scalene triangle | Isosceles triangle | Right-angled triangle | Equilateral triangle |

(2 marks)

10. Each side of a square represents 1 cm.
Find the area of the letter N.

_____ cm^2

(1 mark)

11. Complete the function machine.

22 → −7 → ÷5 →

(1 mark)

12. **Without using a protractor** draw an angle of **about** 45°.

13. One of these number cards is chosen at random.

$$\boxed{1}\ \boxed{2}\ \boxed{3}\ \boxed{4}\ \boxed{5}\ \boxed{6}\ \boxed{7}$$
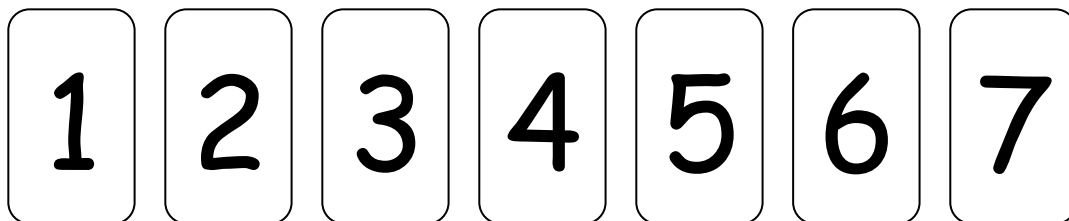
What is the probability of choosing a number **less than 5**?

_____

14. The pie chart shows three search engines that are favourites with teenagers.
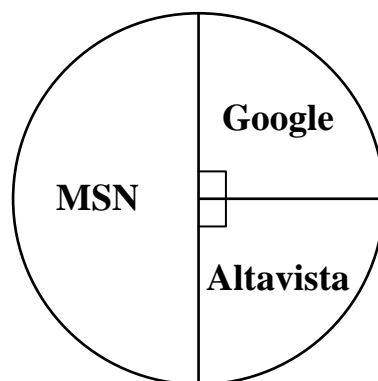
a) The **equally popular** search engines are _____ and _____.

b) The **percentage** representing MSN is _____%.

END OF PAPER

D

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

FORM 4	MATHEMATICS – Main Paper – Scheme D	Time: 1h 40min

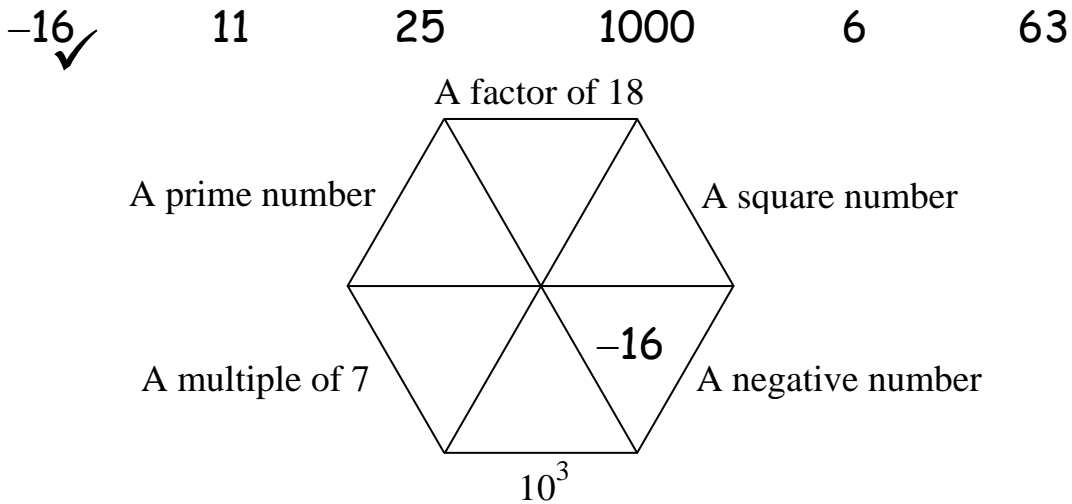| Question	1	2	3	4	5	6	7	8	9	10	11	Total Main	Non Calculator	**Global Mark**
Mark														

DO NOT WRITE ABOVE THIS LINE

Name: _____   Class _____

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

1. Write each of these numbers in its correct place in the diagram.
   The first one is done for you.

   −16 ✓   11   25   1000   6   63

   A factor of 18

   A prime number   A square number

   A multiple of 7   −16   A negative number

   10^3

   (5 marks)

2. Use your calculator to work out $6{\cdot}7 \times 8{\cdot}3 \div 2{\cdot}2$
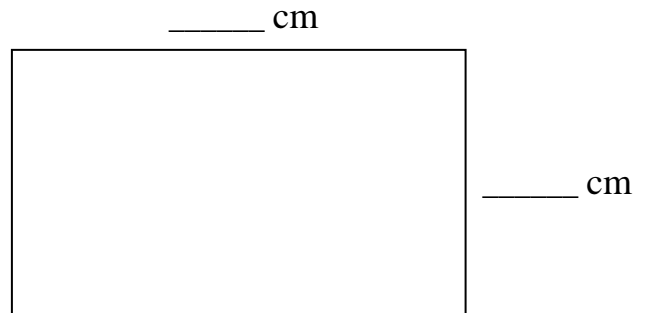   Write your answer:

   a) correct to **2 decimal places**:   _____

   b) correct to the **nearest whole number**:   _____

   c) correct to the **nearest 10**:   _____

   (5 marks)

3. a) Fill in: i) 1 m   = _____ cm   ii) 1 cm   = _____ mm

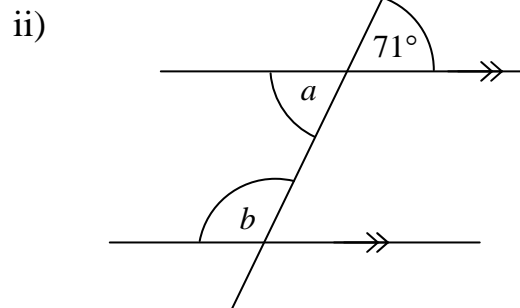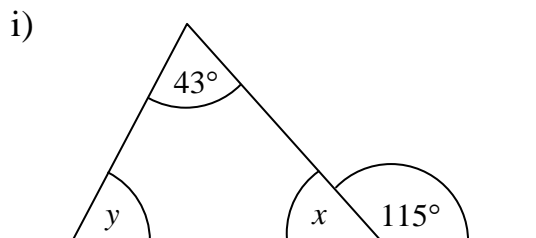   iii) 7·36 m   = _____ cm   iv) 8·5 cm = _____ mm

    b) i) **Use your ruler** to measure the sides of this rectangle.
           Write down your answers on the diagram.

_____ cm

    ii) Find the **area** of the rectangle.

_____ cm

_____cm^2

(8 marks)

4. Find the size of each angle marked with a letter.

    i)

    ii)

x = _____ $^{\circ}$

a = _____ $^{\circ}$

y = _____ $^{\circ}$

b = _____ $^{\circ}$

(7 marks)

5. a) **Shade** $\frac{5}{9}$ of the shape.

b) Simplify to its **lowest terms**: $\frac{12}{18}$

_____

c) Work out: i) $\frac{1}{6} + \frac{4}{6}$

ii) $\frac{13}{15} - \frac{2}{5}$

_____

_____

d) Find $\frac{2}{3}$ of 78 kg.

_____ kg

(10 marks)

6. a) Find the value of: $2^3 \times 5^2$

b) Simplify: $6x - 2y - 5y + 3x$

_____

_____

c) Expand: $3(a - 9)$

d) Given that $p = 3$ and $q = 7$ find the value of $3q - 4p$.

_____

_____

e) Solve the equation: $3x + 5 = 29$

_____

(15 marks)

7. Mario entered these logo commands: PD REPEAT 2 [FD 60 RT 90 FD 120 RT 90]
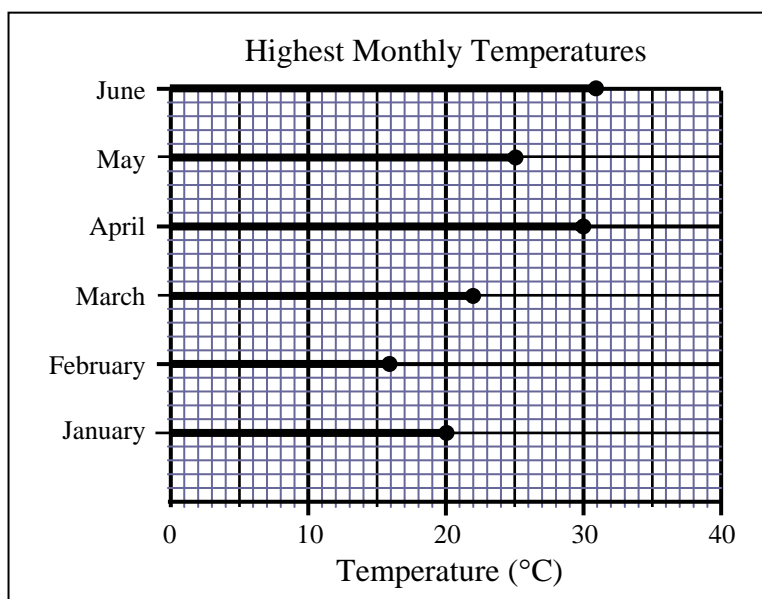
   a) Start from the turtle.
      Draw Mario's shape.

   b) Find the **perimeter** of the
      shape in **turtle steps**.

Ans _____turtle steps

(4 marks)

8. The graph shows the **highest monthly temperatures** from January to June.

Highest Monthly Temperatures

Temperature (°C)

   a) The **range** of temperatures is _____°C.

   b) The **highest** temperature was recorded in the month of _____.

   c) Find the **average** highest temperature for these months.

Ans _____°C

(6 marks)

9. Margaret went on a 4-day tour to Corfu.
The table shows a record of how much she spent.

Margaret did not fill in all the table.
Complete the table for her.

Cost of Tour: Flight, Hotel and Breakfast.	€420.00
Day 1: Meals, taxis, etc.	€86.80
Day 2: I spent 75% of what I spent on day 1.	
Day 3: Shopping. I spent 3 times of what I spent on day 2.	
Day 4: Meals and entrance to Fun Park.	€125.25

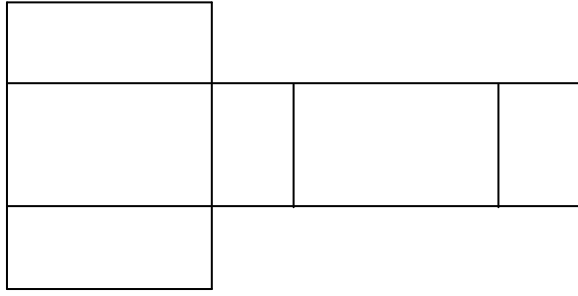Total cost of holiday: € _____

(6 marks)

10. a) Triangle **A** is translated **3 units to the left** and **4 units down**.
Draw the translation of triangle **A** and label the new triangle **B**.
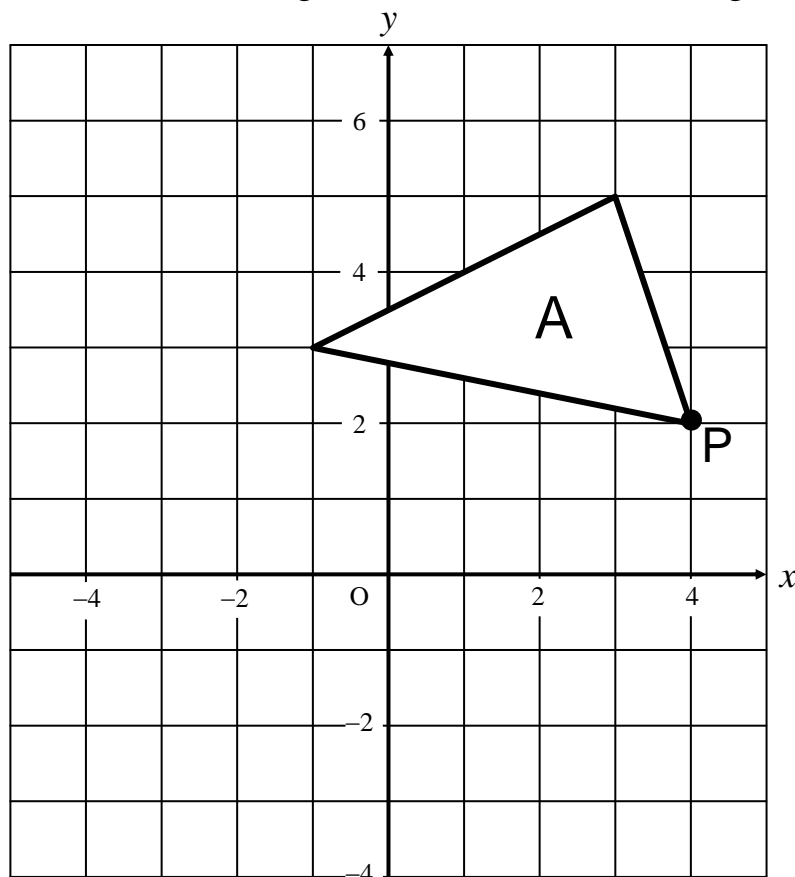
b) After the translation the **image** of point P is point (_____, _____).
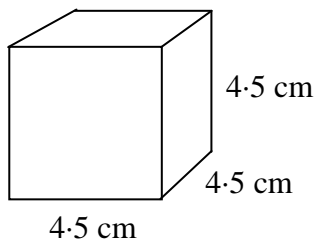
(5 marks)

11. a) Write down the name of the **solid** formed by this **net**.

Ans _____

b) Find the volume of this solid in cm^3.

4·5 cm

4·5 cm

4·5 cm

Ans _____ cm^3

c) Use your ruler, compasses and protractor to draw a **square of side 7·5 cm**.

(9 marks)

END OF PAPER