

KULLEGG SAN BENEDITTU Secondary School, Kirkop

Mark

HALF YEARLY EXAMINATION – 2017/2018

Track 1

Year 9

MATHEMATICS
Non Calculator Paper

TIME: 30 mins

Question	1	2	3	4	5	6	7	8	NC
Mark									

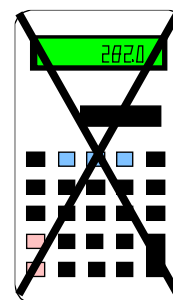
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NAME: _____

CLASS: _____

Instructions to Candidates

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



1. Complete the following:

(a) 4500 g = _____ kg

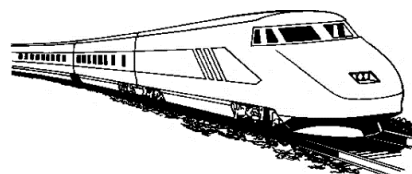
(b) 3.7 km = _____ m

(c) $\frac{1}{4}$ litre = _____ ml

(d) 4300 cm = _____ m

(4 marks)

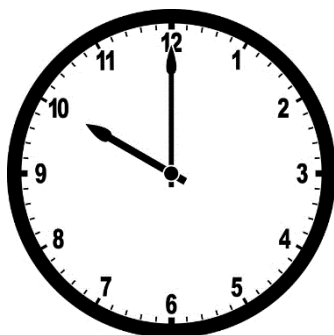
2. A train travels 450 km in 2 hours.
What is the speed in km/hr?



Answer: _____ km/hr

(3 marks)

3. The clock shows the time when the airplane leaves Malta airport to Catania in the **evening**.



(a) Write down this time in 24-hour format.

Answer: _____

(b) The flight to Catania takes 45 minutes.
At what time does the airplane arrive in Catania?

Answer: _____

(2 marks)

4. (a) (i) Complete by filling in the empty boxes:

(i) $\frac{1}{6} = \frac{\boxed{}}{30}$

(ii) $\frac{2}{5} = \frac{\boxed{}}{30}$

(iii) Use your answers for a (i) to work out: $\frac{1}{6} + \frac{2}{5} = \frac{\boxed{}}{30} + \frac{\boxed{}}{30} = \frac{\boxed{}}{30}$

(b) Fill in:

$$75\% = \frac{\boxed{}}{100} = \frac{\boxed{}}{4}$$

(5 marks)

5. Arrange in order **smallest** first:

5.2 0.52 0.052 52

_____ , _____ , _____ , _____

(2 marks)

6. (a) Work out the following:

(i) $9 + (-6) =$ _____

(ii) $10 - (-8) =$ _____

(b) Marisa parks her car in an underground parking on level -3 . She uses the lift on level -3 to go to the second floor (level $+2$). How many floors does the lift go up?

Answer: _____ floors

(3 marks)

7. (a) Find the value of $3x + 2y - 4z$ given that $x = 4$, $y = 2$, and $z = 1$.

Answer: _____



(b) A chocolate bar costs 46c. Round the cost of the chocolate bar correct to the nearest 10c.

Answer: _____ c

(3 marks)

8. (a) What is the name of a six-sided polygon?

Answer: _____

(b) Find the size of the angles marked with letter:

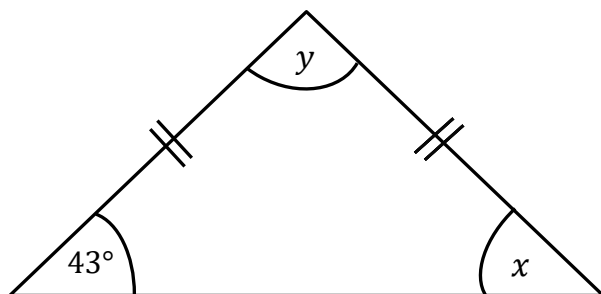


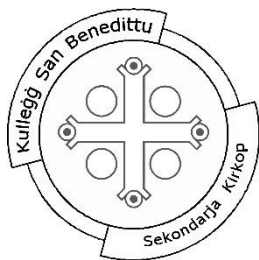
Diagram NOT to scale

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

$$y = \text{_____}^\circ$$

(3 marks)

END OF NON-CALCULATOR PAPER



KULLEGG SAN BENEDITTU

Secondary School, Kirkop

Mark

HALF YEARLY EXAMINATION – 2017/2018

Track 1

Year 9	MATHEMATICS Main Paper	TIME: 1 hr 30 mins
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Question	1	2	3	4	5	6	7	8	9	10	11	12	13	Total Main	Non Calc	Global Mark
Mark																

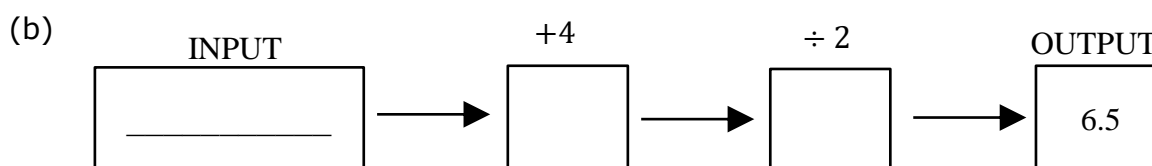
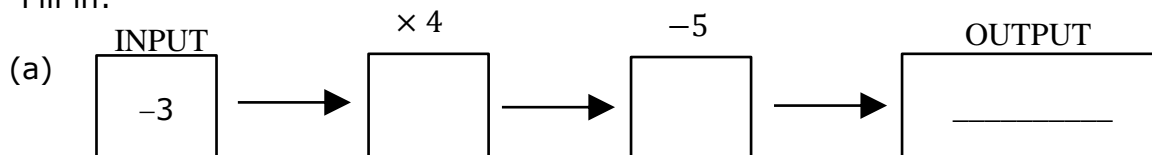
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NAME: _____ CLASS: _____

INSTRUCTIONS TO CANDIDATES:

- Answer all questions.
- This paper carries 75 marks.
- Calculators and mathematical instruments are allowed but all necessary working must be shown.

1. Fill in:



(2 marks)

2. (a) Which of these numbers is the **smallest**?

$$-1, \frac{1}{4}, 0, -10, -10\frac{1}{2}$$

Answer: _____

(b) Write these numbers in order **starting from the largest**.

$$-2, 5, 0, -3$$

Answer: _____ , _____ , _____ , _____

(3 marks)

3. (a) Continue the following number patterns:

i) 7, 10, 13, 16, _____, _____

ii) 1, 2, 4, 8, 16, _____, _____

iii) $5, 5\frac{1}{2}, 6, 6\frac{1}{2}, 7, ______, ______$

iv) 1, 4, 9, 16, 25, _____, _____

(b) These patterns are formed using matchsticks.



Pattern 1



Pattern 2



Pattern 3

Pattern 4

(i) Draw Pattern 4.

(ii) How many matchsticks are needed to form Pattern 5?

Answer: _____

(6 marks)

4. (a) The temperature on Mount Blanc last night dropped to -8°C . During the day it rose to 11°C . Find the change in temperature.



Answer: _____ $^{\circ}\text{C}$

(b) Given that $x = -5$, $y = -2$ and $z = 3$, work out:

(i) xy

Answer: _____

(ii) $y - 4$

Answer: _____

(iii) $xz - 2$

Answer: _____

(iv) $\frac{20}{x}$

Answer: _____

(6 marks)

5. (a) **Simplify:**

(i) $2a + b + 3b - a + 5$

Answer: _____

(ii) $5x - 2y - 7x - 5y$

Answer: _____

(b) **Solve:**

(i) $3x = 48$

Answer: _____

(ii) $\frac{x}{2} = -5$

Answer: _____

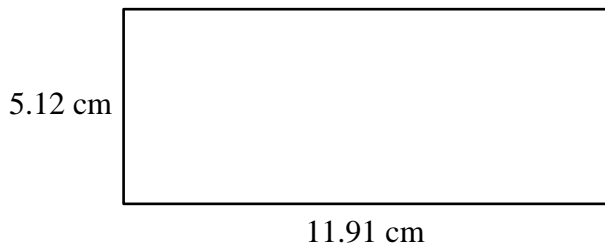
(iii) $2x - 1 = 17$

Answer: _____

(11 marks)

6. (a) (i) Round 11.91 to the nearest 10 _____

(ii) Round 5.12 to the nearest whole number _____



(b) Using your answers in (a), **estimate** the area of this rectangle.

Answer: _____ cm²

(c) Find the **actual** area of the rectangle. Give your answer to 2 decimal places.

Answer: _____ cm²

(5 marks)

7. (a) Work out the following fraction calculations. **Show** your working.

(i) $\frac{1}{13} + \frac{4}{13} + \frac{6}{13}$

(ii) $\frac{5}{8} - \frac{1}{4}$

Answer: _____

Answer: _____

(b) Mark and Maria share €25. Maria gets €15.
What **fraction** of the money did she get?

Answer: _____

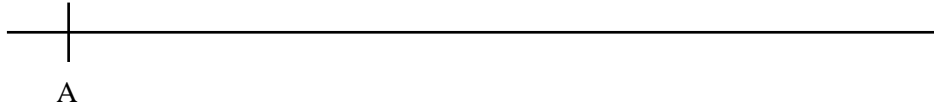


(c) Alessia has €60, and she spends $\frac{1}{4}$ of this money on a pair of shoes. **How much** do the shoes cost?

Answer: € _____

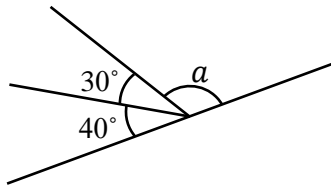
(6 marks)

8. (a) Using ruler and protractor, at A draw an angle of 55° .



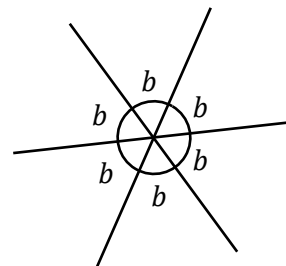
(b) Calculate the missing angles. (*The diagrams are **not** to scale.*)

(i)



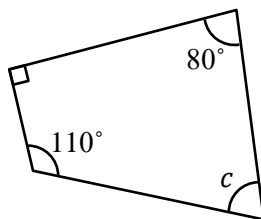
Answer: $a =$ _____

(ii)



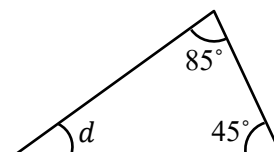
Answer: $b =$ _____

(iii)



Answer: $c =$ _____

(iv)



Answer: $d =$ _____

(8 marks)

9. (a) Use numbers from the list below, to fill in the appropriate measurements:

2.1 m , 5 km , 1000 km , 20 m

- (i) Distance between Mgarr and Mosta _____
- (ii) The height of a tower _____
- (iii) The width of a van _____



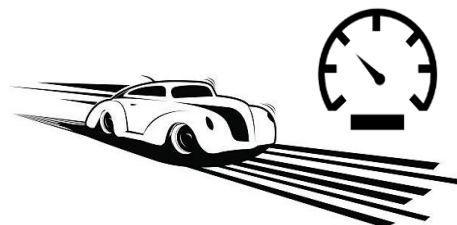
- (b) A bottle has 2.4 litres of water. I pour all the water into 12 glasses. How much water does **each** glass have? Give your answer in millilitres.

Answer: _____ ml

(6 marks)

10. A car leaves Milan and travels at a speed of 100 km/hr, on the highway towards Venice. After 2 hours the driver stops for a break.

- (a) What distance has he covered in these 2 hours?



Answer: _____ km

- (b) Just 50 km are left to reach his destination. If the driver drives at the same speed as before, how much travelling time is left? Give your answer in minutes.

Answer: _____ mins

(4 marks)

11. (a) 12 students out of a class of 25 students are girls.
What percentage of the students are boys?

Answer: _____ %

- (b) During a sale the price of a model ship is reduced by 30%.
What is the price of the model ship during the sale if the price was €35.00 before the sale?

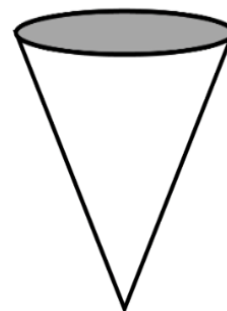
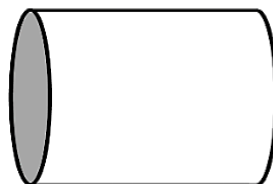
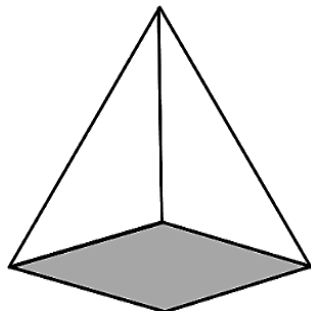
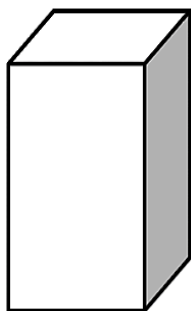


Answer: € _____

(5 marks)

12. (a) What are the names of the following solids? Choose from this list:

Cube, Cone, Pyramid, Cuboid, Sphere, Cylinder



- (b) Use the isometric grid below to draw a cuboid with length of sides of your own choice.



(6 marks)

13. The following are the marks obtained by the students in a class.

70 25 65 90 65 77 21 55 81

- (a) Work out the **mean** mark of the class.



Answer: _____

- (b) What is the **mode**?

Answer: _____

- (c) Find the **median** mark.

Answer: _____

- (d) Calculate the **range**.

Answer: _____

(7 marks)

END OF MAIN PAPER