

Candidate Number										Candidate Name

JUNIOR SECONDARY CERTIFICATE

MATHEMATICS

1200/1

PAPER 1 (Short Questions)

1 hour

Marks 45

2013

Additional Materials: Non-programmable scientific calculator

INSTRUCTIONS AND INFORMATION TO CANDIDATES

- Candidates answer on the Question Paper in the spaces provided.
- Write your Centre Number, Candidate Number and Name in the spaces at the top of this page.
- Answer **all** the questions. **All working must be shown clearly.**
- Write in dark blue or black pen.
- You may use a non-programmable calculator.
- Do not use correction fluid.
- Do not write in the margin *For Examiner's Use*.
- If an answer is not exact, it should be rounded to **one** decimal place and for money give your answer to **two** decimal places.
- The number of marks available is shown in brackets [] after each question or part question.

<i>For Examiner's Use</i>	
<i>Marker</i>	
<i>Checker</i>	

This document consists of **8** printed pages.



Republic of Namibia

MINISTRY OF EDUCATION

1 Write the following number as a decimal fraction, correct to 3 decimal places

(a) $\frac{1}{11}$,

Answer (a) [1]

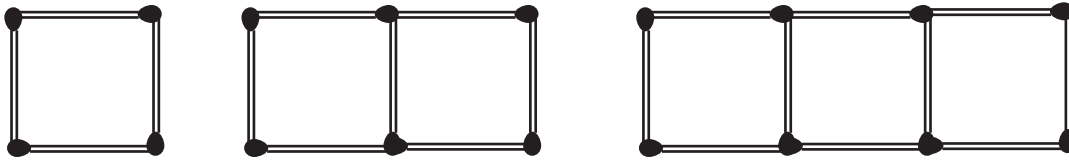
(b) 2.1×10^{-2} .

Answer (b) [1]

2 Workout $2.1 \times 10^{-2} - 2.1 \times 10^{-3}$, giving your answer in standard form.

Answer..... [2]

3 Matches are used to make squares below.



Complete the table

number of squares	1	2	3	
number of matches	4	7		16

[2]

4 Find the Highest Common Factor (HCF) of 15 and 30.

Answer..... [1]

5 On a Monday morning, a farmer realises that, $\frac{3}{5}$ of his goats slept in the kraal. Calculate the percentage of the farmer's goats that slept outside the kraal.

Answer..... % [2]

6 Fill in the missing number in the following statement.

$$\frac{99}{132} = \frac{33}{\dots\dots\dots}$$

[1]

- 7 Loide receives N\$1 100 pocket money every month. She spends 54% of her pocket money on transport.

Calculate the amount she spend on transport per month.

Answer N\$ [2]

- 8 (a) During an athletics event, a snack bar sold 84 cola cans and 54 lemonade cans on the first day.

Write down the ratio of cola cans to lemonade cans sold the first day.
Give your answer in its simplest form.

Answer (a)..... : [1]

- (b) On the second day, the snack bar sold 28 cola cans. The ratio of the types of cans sold was as follows

cola cans : lemonade cans = 4 : 5.

How many lemonade cans where sold?

Answer (b) [2]

- 9 Mr Goaseb travelled 200 km in 2.5 hours.

Calculate his average speed.

Answer.....km/h [2]

- 10 Selma bought a second hand chair for N\$50.00. She later sold it for N\$75.00

Calculate the percentage profit Selma made.

Answer..... % [2]

- 11 Mr Witbooi exchanged N\$2 400 to US dollars. The exchange rate was,
\$1.00 = N\$10.24

Determine the amount of money he got in US dollars

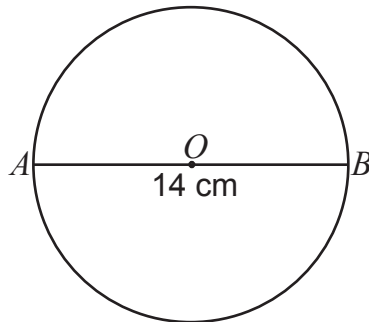
Answer \$..... [2]

- 12 A farmer has 20 hectares of land?

Express 20 hectares in square metres (m^2).

Answer..... m^2 [1]

- 13 The diagram shows a circle of centre O, with line $AB = 4$ cm.



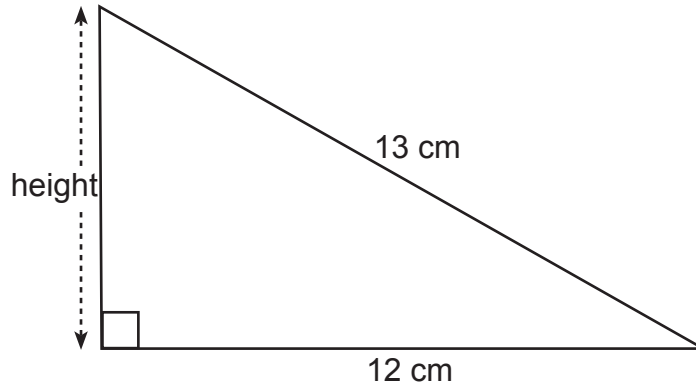
- (a) State the special name for line AB .

Answer (a)..... [1]

- (b) Calculate the circumference of the circle. ($\pi = \frac{22}{7}$)

Answer (b) [2]

- 14 The diagram shows a right angled triangle. The area of the triangle is 30 cm^2 .



Calculate its height.

Answer..... [2]

- 15 The list of different types of angles is given.

List: reflex, right, acute and obtuse

Use the list to name the angle with the following values.

- (a) 120°

Answer (a) [1]

- (b) 200°

Answer (b) [1]

16



diagram 1



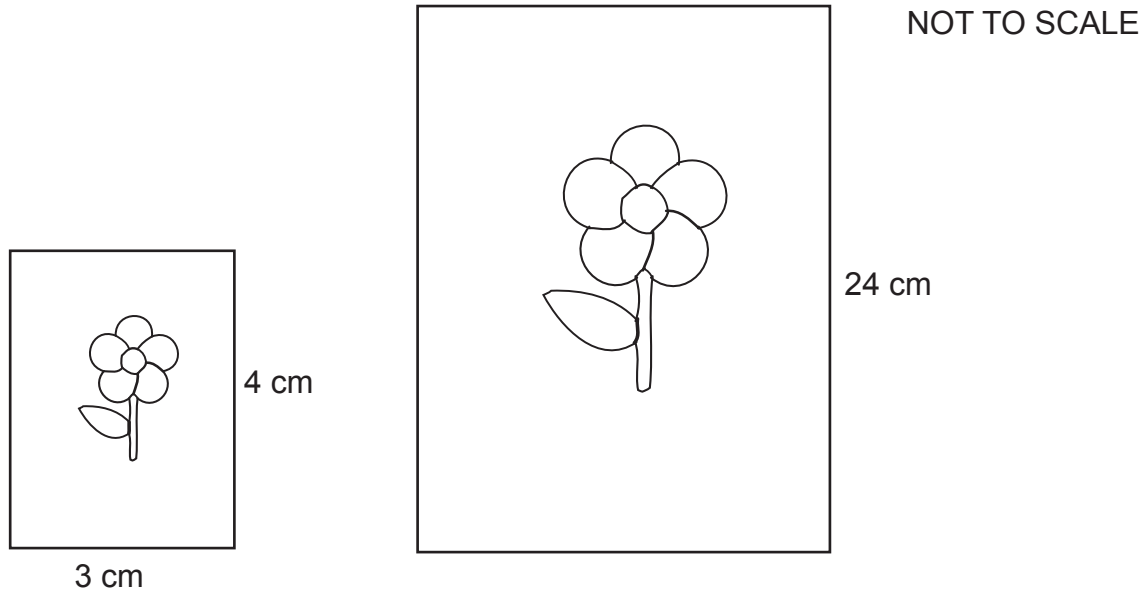
diagram 2

- (a) What is the order of rotational symmetry does diagram 1 has?

Answer (a) [1]

- (b) Draw the line of symmetry on diagram 2. [1]

- 17 A photograph measuring 4 cm long and 3 cm wide is enlarged. The length of the enlarged photograph is 24 cm as shown in the diagram.



- (a) What is the width of the enlarged photograph?

Answer (a)cm [1]

- (b) Write down the scale factor of enlargement.

Answer (b) [1]

- 18 (a) Simplify

(i) $t^2 \times t^6$

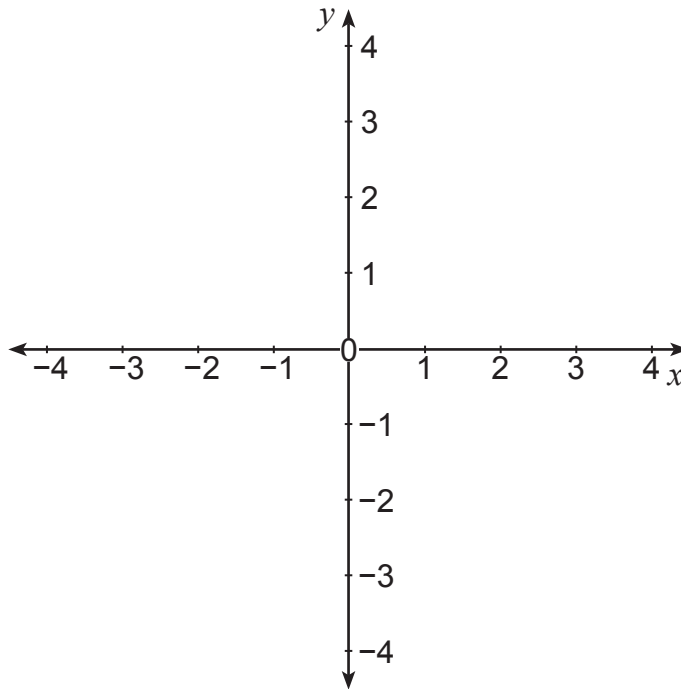
Answer (a)(i) [1]

(ii) $4(3x + 2)$

Answer (a)(ii) [1]

- (b) Solve the equation $3(2x - 1) = 3$

Answer (b) [2]



On the grid above,

(a) Draw the line of $y = -3$, [1]

(b) Plot the point $(2, 0)$ and label it A . [1]

20 The ages of the people in a group are as follows;

63 32 34 64 32 27 35

(a) Calculate the mean.

Answer (a) [2]

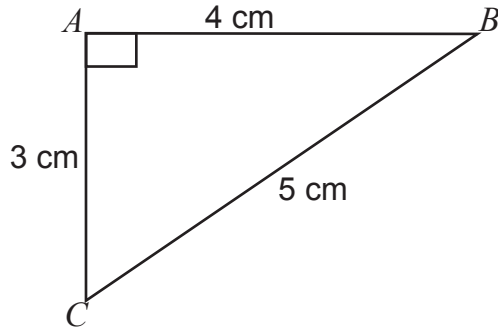
(b) Determine the mode.

Answer (b) [1]

(c) Find the median.

Answer (c) [1]

21 The diagram shows a right angled triangle.



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Determine the value for

(a) $\sin \hat{A}BC$,

Answer (a) [1]

(b) $\tan \hat{A}CB$.

Answer (b) [1]