

REPUBLIC OF SOMALILAND

FORM EIGHT EXAMS, 2018

MATHEMATICS



NATIONAL EXAMINATION BOARD





SOM EXAMS

TOTAL

Name

School

Roll No

REPUBLIC OF SOMALILAND
MINISTRY OF EDUCATION AND SCIENCE
SOMALILAND NATIONAL EXAMINATION AND CERTIFICATION BOARD
GRADE 8

MATHEMATICS

JUNE 2018

2 HOURS

PLUS 10 MINUTES FOR READING THROUGH THE PAPER

INSTRUCTIONS:

- This paper consists of **10** printed pages.
- Count them now. Inform the invigilator if there are any pages missing or extra ones.

This Exam consists of **TWO** parts:

Part One	: 30 Multiple Choice	60 Marks
Part Two	: 8 Structured questions	40 Marks

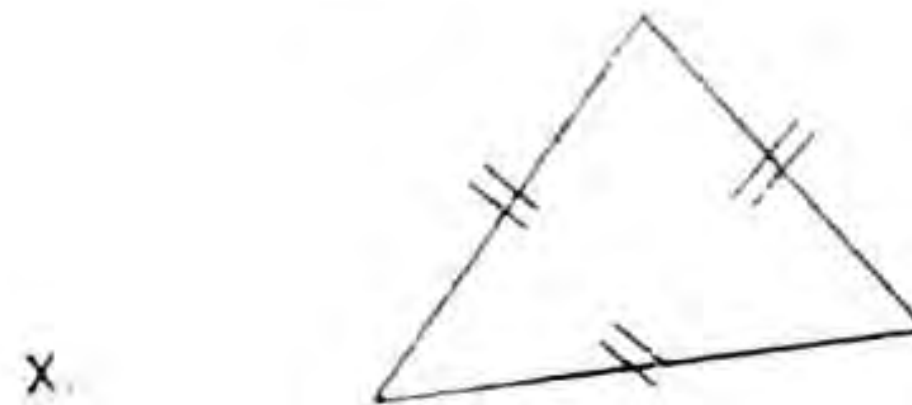
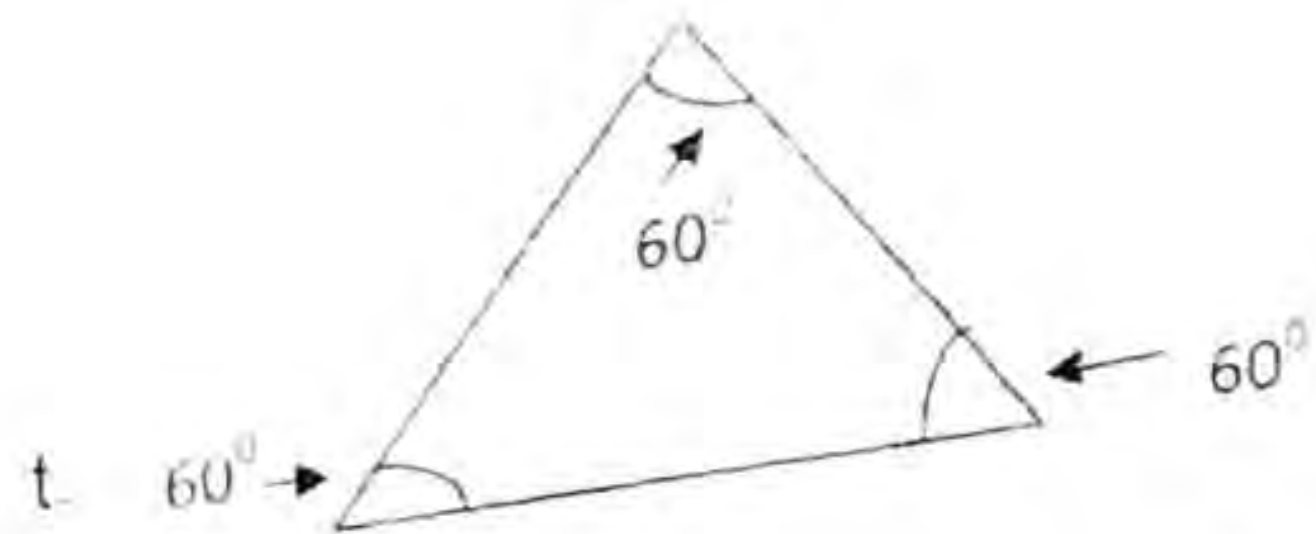
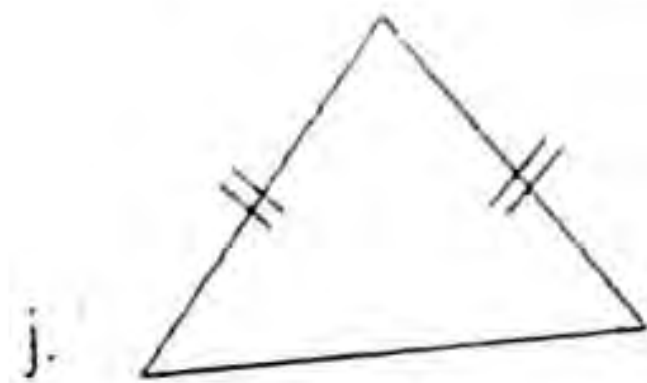
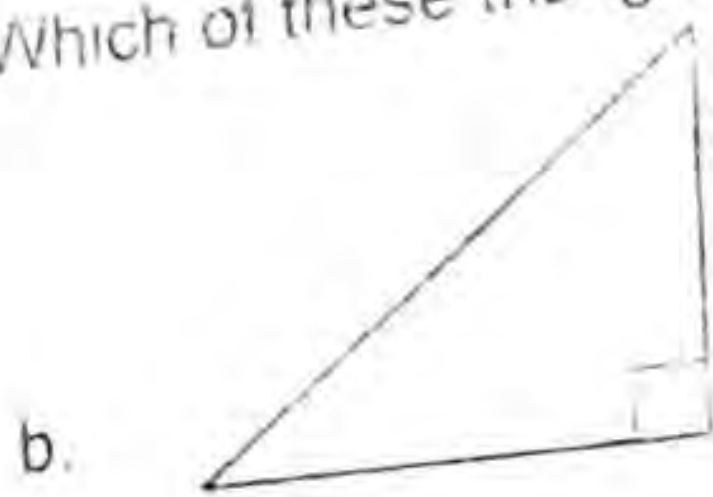
TOTAL **100 Marks**

- Answer **ALL** questions in Part 1 and Part 2.
- Calculator, Mobile and extra papers are not allowed



Work On This Sheet As A Rough, No Marking

12- Which of these triangles is isosceles?



13- Which of these measures is the measure of weight?

a. meter

b. Centimeter

c. Kilometer

d. Kg

14- The mode of this group : 40, 30, 31, 41, 42, 30, 45, is:

a. 41

b. 31

c. 30

d. 42

15- The age of 8 boys are 12, 18, 19, 3, 11, 6, 4, 7. Their mean is:

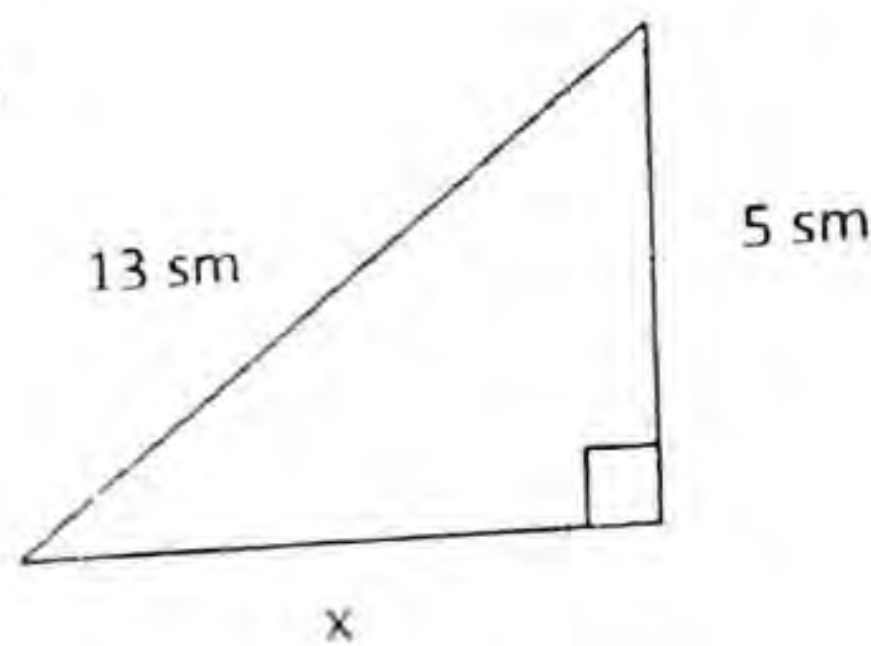
a. 10

b. 11

c. 12

d. 18

16- Calculate the length x.

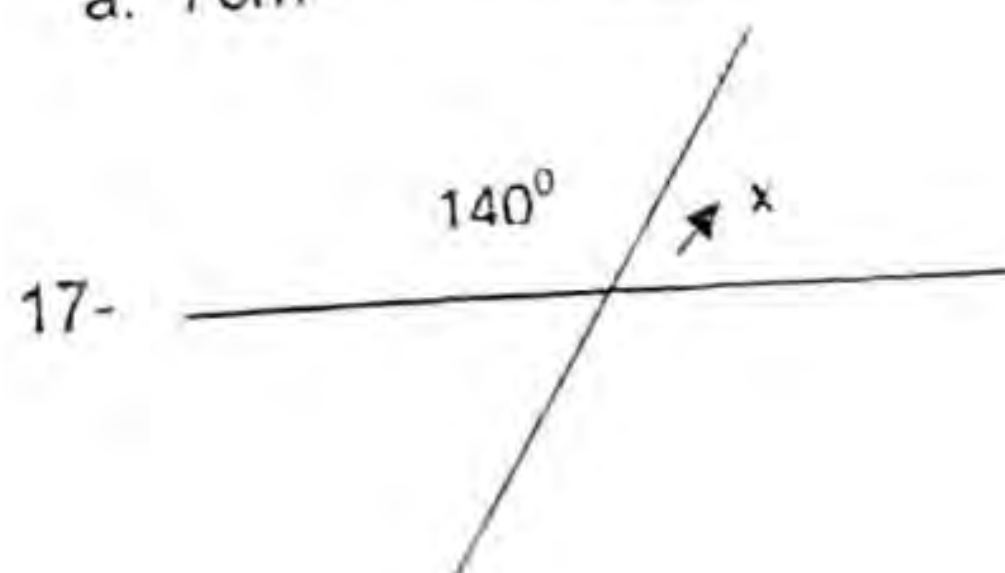


a. 7cm

b. 5 cm

c. 13 cm

d. 12 cm



The value of angle x is:

a. 100°

b. 80°

c. 60°

d. 40°

18. Change $(32)_5$ to base ten

a. 12

b. 14

c. 16

d. 17

SLNECB©2018



19. Change 15000 m to Km:

- a. 150 b. 100 c. 15 d. 10

20. Change 7200 seconds to hours :

- a. 3, b. 1 c. 2, d. 4

21. If $A = \{1, 5, 6, 8, 9\}$. Which of the solution sets are subsets of A:

- a. $\{1, 10\}$ b. $\{2, 5, 6\}$ c. $\{4, 6, 8, 9\}$ d. $\{5, 6\}$

22. The factors of $x^2 + 5x + 4 = 0$ are :

- a. $(x + 1)(x + 2)$ b. $(x - 1)(x - 2)$ c. $(x + 1)(x + 3)$ d. $(x - 1)(x - 3)$

23. $(221)_5 + (312)_5$ is:

- a. $(533)_5$ b. $(1033)_5$ c. $(133)_5$ d. $(331)_5$

24. $(0.2)^3$ is equal to:

- a. 0.004 b. 0.002 c. 0.4 d. 0.008

25. The formula for finding Cosine is:

- a. $\frac{\text{Opposite}}{\text{Adjacent}}$ b. $\frac{\text{Adjacent}}{\text{Opposite}}$ c. $\frac{\text{Adjacent}}{\text{Hypotenuse}}$ d. $\frac{\text{Opposite}}{\text{Hypotenuse}}$

26. The value of the variable in the ratio: $\frac{2}{5} = \frac{6}{\eta}$ is :

- a. 2 b. 6 c. 15 d. 30

27. The slope of the line passing through the two points (5, 6) and (3,4) is:

- a. 1 b. 2 c. 3 d. 4

28. The sum of the ratio 4:3:2 is :

- a. 800 b. 900 c. 9 d. 7

29. In logarithm form , $10,000 = 10^4$ is :

- a. $\log_{10} 1000 = 4$ b. $\log_4 10,000 = 9$ c. $\log_4 4 = 1000$ d. $\log_4 10 = 100$

30. 2.5 L when changed to milliliter is:

- b. 250 ml t. 25 ml j. 22.5 mL x. 225 mL

PART TWO : STRUCTURED QUESTIONS
Answer all questions

(3 marks)

1. a). Simplify

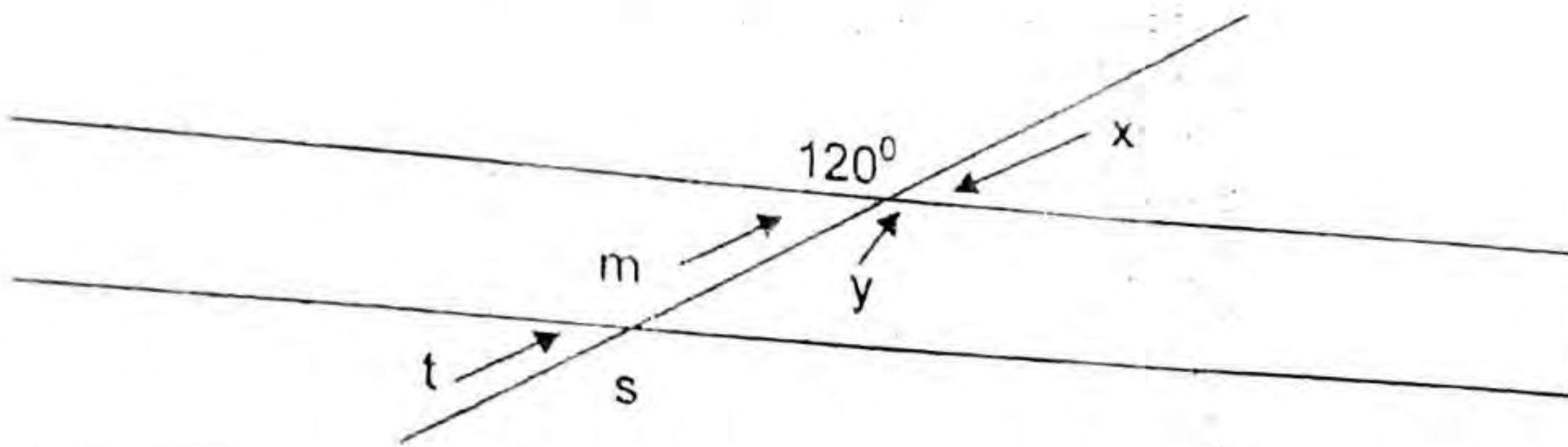
$$\frac{2}{3} - \frac{1}{4} \times \frac{8}{5} + \frac{1}{3}$$

b). Find the solution of these simultaneous equations below by graph :
(2 marks)

$$2x + 3y = 1$$

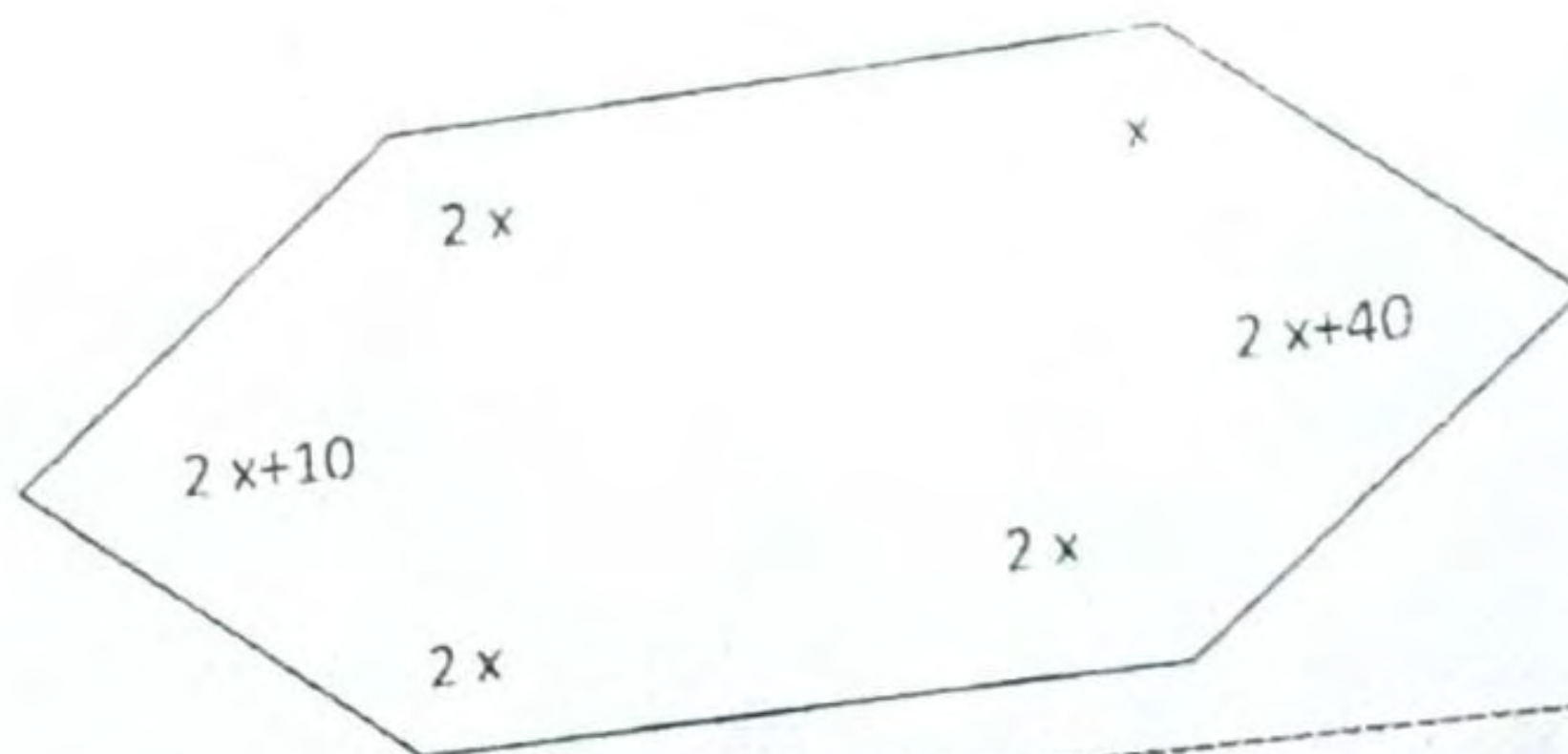
$$3x + y = -2$$

(5 marks)

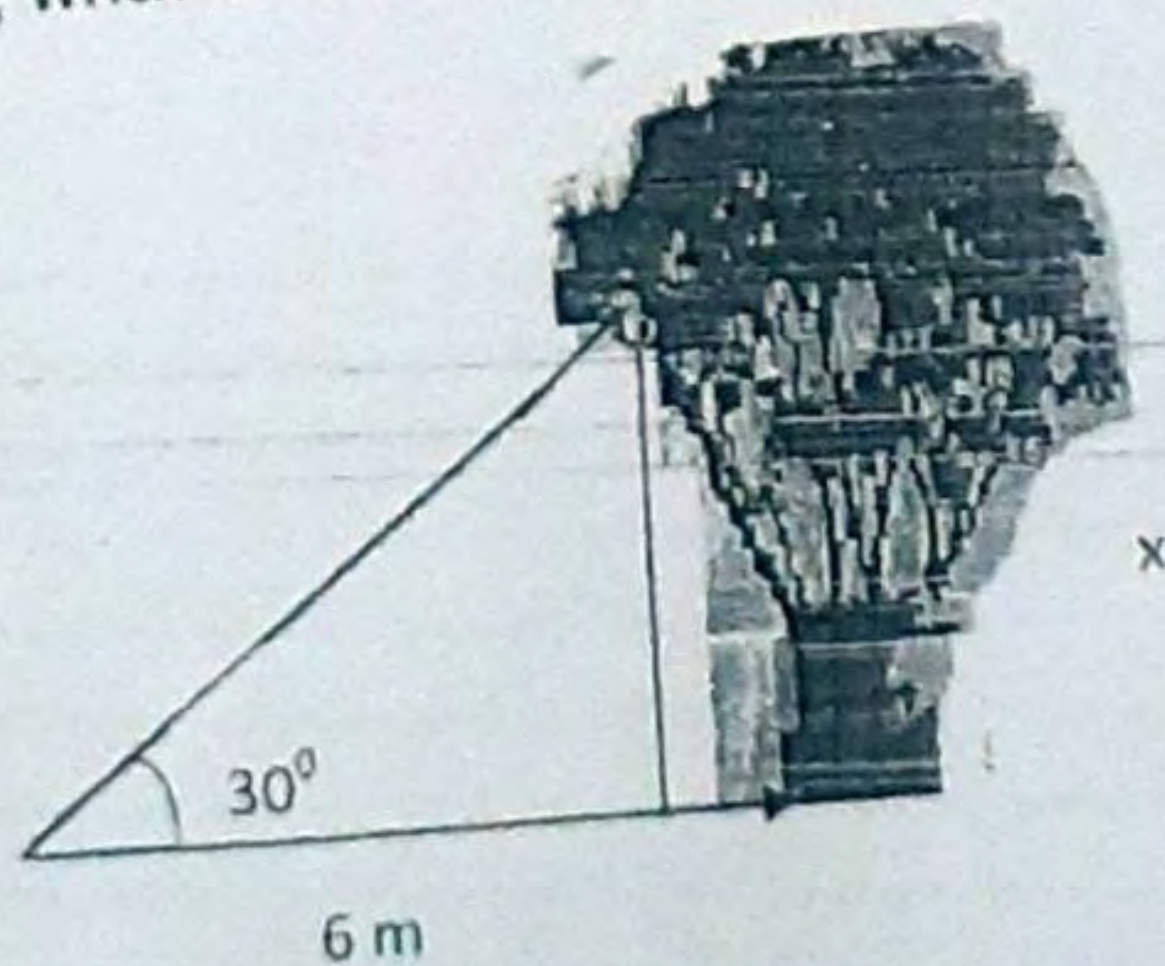

$$A = \{1, 2, 3\}$$
$$C = \{1, 2, 3, 6\}$$

Find : A) $A \cap C$ B) $A \cup B$ C) $B \cap C$
D) $B \cup C$ E) $A \cup C$

4. Find the value of x in this hexagon.



5. The ground distance between a man and a tree is 6m. If the angle of elevation of his eye is 30° , what is the height of the tree? (5 marks)





SOM EXAMS

a) What is the value of x in this equation?

$$2^x = 8$$

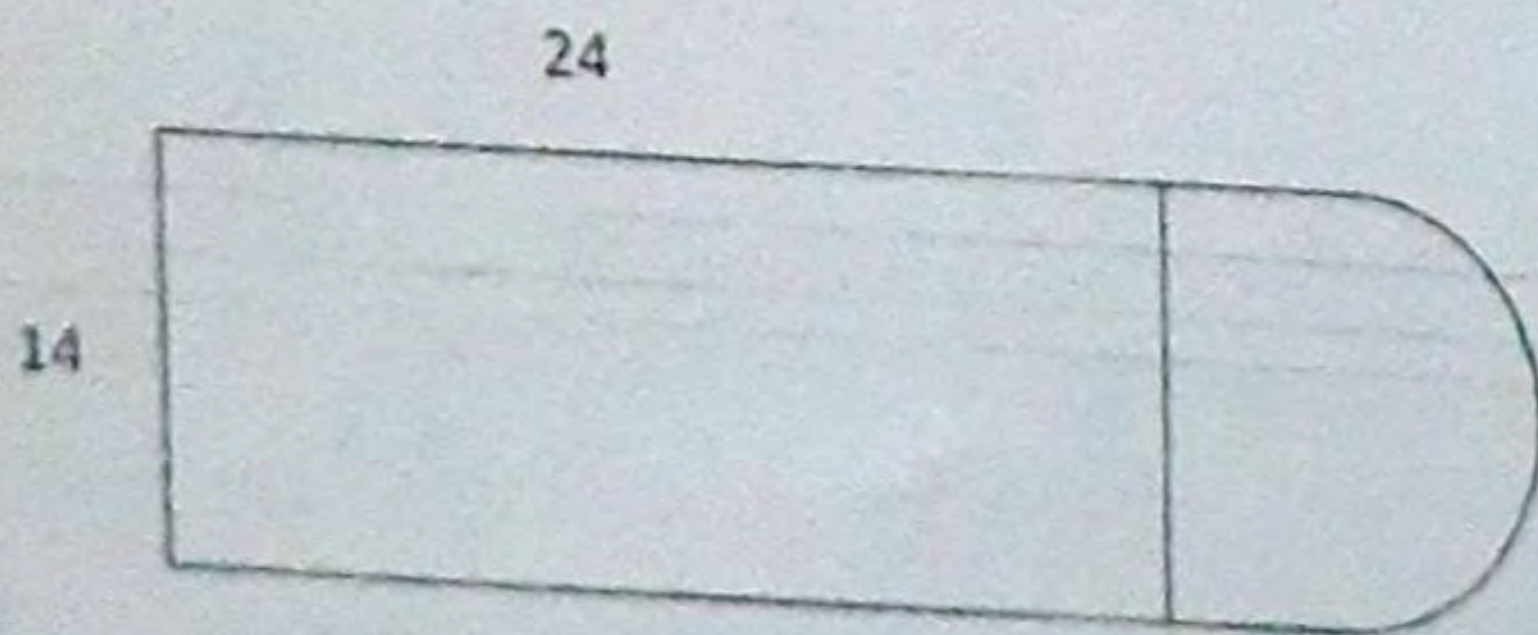
(3marks)

b) Evaluate $\log_4(256)$

(2marks)

7. Find the perimeter of the below figure.

(5marks)



8. The age of the father is 3 times that of his son. Six years ago the age of the father was 5 times that of his son. Find the age of the son? (5marks)

-End-