

# NEGOMBO EDUCATION ZONE

2<sup>nd</sup> TERM 2016

12.07.2016

GRADE 8

MATHEMATICS

2 HOURS

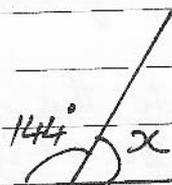
REFERENCE  
ONLY

Part I

1. Give to the nearest 10  
7585

2. Find the value  $(-7) + (-3)$

3. Find the value of  $x$



4. Find the perimeter of an equilateral triangle with a side 13cm

5. Simplify  $2\frac{1}{3} \times \frac{7}{4}$

6. If  $2x - 1 = 23$  find the value of  $x$

7. List the elements of the set of letters of the word "DATABASE"

8. Find the 5<sup>th</sup> term in the sequence when the General Term is  $2n+1$

9. If the length of a side of a cube is 5 cm. Find the surface area of the cube.
10. Find the value of  $3^5$
11. Write the i) Supplement ii) Compliment of  $42^\circ$
12. Remove brackets and simplify  
 $4(p+q-2) + (p-q+1)$
13. Separate the factors and write  
 $2a+6y+12$
14. Give 27750 kg in Tonnes and kg
15. Find the square root of 729 using prime factors
16. Find the value of  $0.625 \div 2.5$
17. If  $3:5 = 9:x$ , find the value of  $x$
18. Give  $1\frac{1}{2}$  as a percentage
19. Find the number of Vertices in solid having 8 Edges and 5 Faces
20. A hexagon of side 8 cm is constructed using a wire 50 cm long. What is the length of wire remaining after the construction.

Library  
12/17

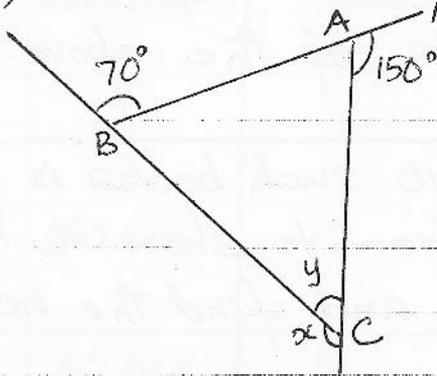
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PART II.

ANSWER ALL QUESTIONS

1. a) Find the value of  $x$  and  $y$

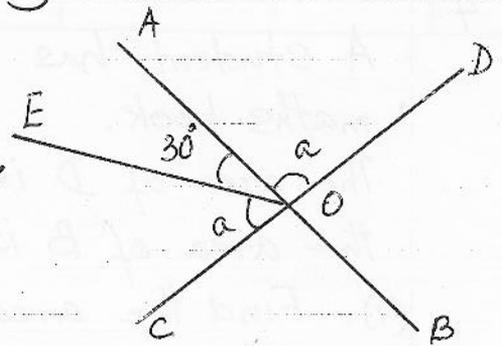


- b) AB and CD are straight lines.

(i) Name a pair of vertically opposite angles.

(ii) Name the supplementary adjacent angle to  $\hat{COE}$

(iii) Find the value of  $a$ .



2. a) Remove brackets and simplify

(i).  $3x - 2(x - 7)$

(ii).  $x^2(y - z + 1) - 2x^2z$

(b) (i). Simplify  $3\frac{1}{2} \div \left(\frac{2}{5} + \frac{1}{15}\right)$

(ii). Find the value  $\frac{5.4 \times 0.5}{0.6}$

(c). The area of a square is  $1225 \text{ cm}^2$ . Find the length of a side.

3

The price of a book was Rs.  $x$ . The price was increased by Rs.  $7\frac{1}{2}$ .

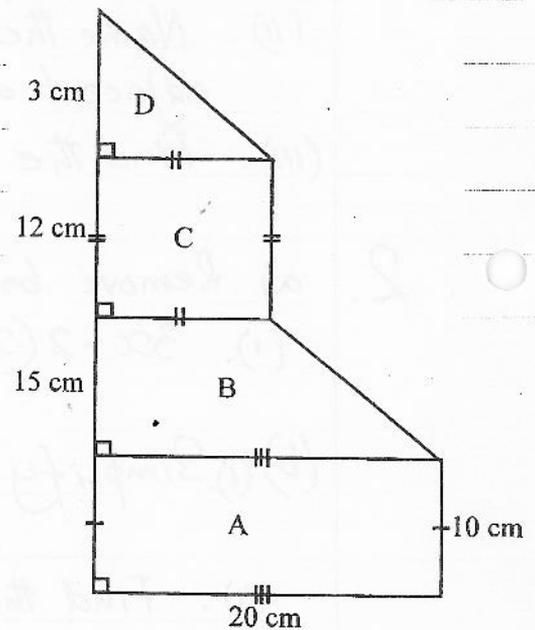
- (i). State the new price of a book as an algebraic expression
- (ii). Give the value of 10 such books using brackets
- (iii). Remove the brackets of the above algebraic expression
- (iv). If the price of 10 such books is Rs. 470, construct an equation to show it.
- (v). Solve the equation and find the new price of a book.

4.

A student has drawn the following diagram in his maths book.

The area of D is  $18\text{cm}^2$  and the area of B is  $240\text{cm}^2$ .

- (i). Find the area of A.
- (ii). Find the area of C.
- (iii). Give the ratio of area A and area C in its simplest form.
- (iv). Find the area of the complete figure.
- (v). What fraction of area C is the area of D? State it as a percentage.



5. The table below shows how two partners invested money in a business. Copy the table and fill in the blanks.

Name	Money Invested.	Time Months	Money $\times$ Time	Ratio in which profit is shared	Net Profit	Profit gained by each partner
Rachith	50,000	12	.....	.....	75000	.....
Charith	50,000	8	.....	.....		.....