

**REFERENCE ONLY**

SECOND TERM TEST - 2016

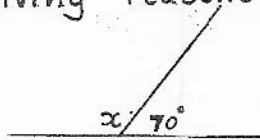
GRADE 9 - MATHEMATICS.

class Number: .....

PAPER I

12.08.2016 2 hours.

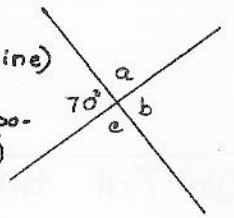
① Find the value of  $x$  giving reasons.



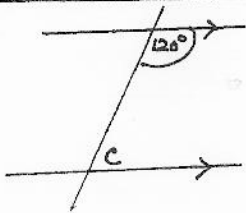
② Fill the blanks.

$a = \dots\dots$  (angles on a straight line)

$b = \dots\dots$  (vertically opposite angles)

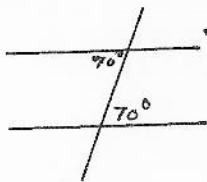


③ Find the value of  $c$  giving reasons.

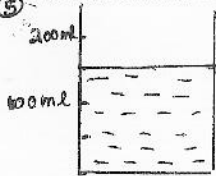


④ Are AB and CD parallel?

(b) why?



⑤ What is the volume of water in



(a) ml .....

(b)  $\text{cm}^3$  .....

⑥ Turn 1.5 l into ml.

⑦ The area of the base of a tank is  $6000\text{cm}^2$ . If the height is 40cm, what is the volume of the tank?

⑧ Turn 250 000 ul to cubic centimetres.

⑨ Fill the box  $3 : 5 = 9 : \square$

⑩ Is number of toffees you can buy and the value of it in direct proportion?

Yes/No.

☺ If a calculator keys were pressed as given below, what is the answer?

$$\boxed{35} \times \boxed{100} + \boxed{4} = \dots\dots\dots$$

(12) Fill the box.

$$a^3 \times a^3 = a^{\boxed{\phantom{000}}}$$

(13) Fill the box

$$\frac{1}{8} = 2^{\boxed{\phantom{000}}}$$

(14)  $\log_5 125 = \boxed{\phantom{000}}$  fill the box.

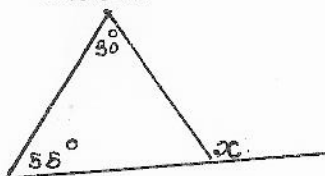
(15) Describe the locus of a moving point at a constant distance to a fixed point  $O$



(16) Find the value of  $x$  in

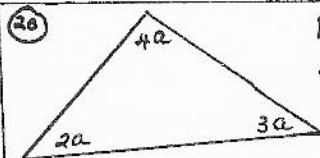
$$3x - 4 = 8$$

(17) Find the value of  $x$  giving reasons.



(18) Make  $m$  the subject of  $F = ma$ .

(19) Find the circumference of a circle with radius 7cm?

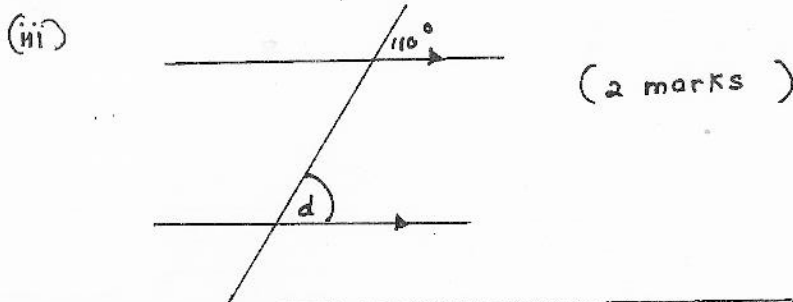
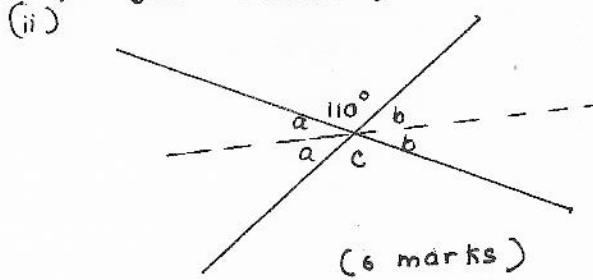
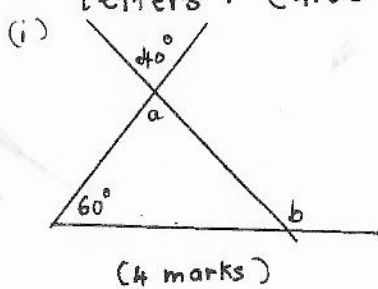


Find the value of  $a$  giving reasons.

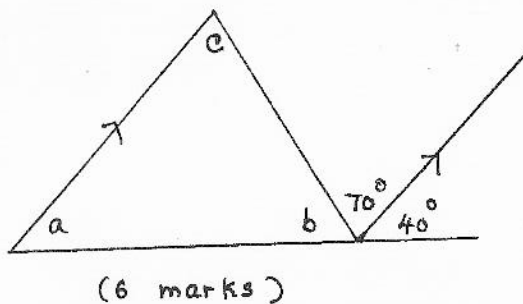
class Number:-

Answer 5 questions only.

(1) Find the value of the angles denoted by the English letters. (Give reasons for your answer)

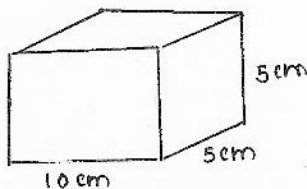


(2)(i) Find the values of the angles denoted by the English letters. (Give reasons for your answer).



- (ii) Angles of a triangle are at the ratio of 2:1:1.  
 (a) Find the value of the smallest angle giving reasons. (3 marks).  
 (b) Find the value of the largest angle. (2 marks).  
 (c) Is this a right angled triangle? (1 mark)

(3)



- (a) Find the volume of the cuboid in  $\text{cm}^3$ . (2 marks)  
 (b) Turn the volume into ml. (2 marks)  
 (c) Turn the volume into litres. (2 marks)  
 (d) A container of the shape of a cuboid measures 20cm long 15 cm wide and 5cm high. Into how many small