**INDIA INTERNATIONAL SCHOOL MANGAF, KUWAIT**

**HOLIDAY HOMEWORK 2018-19 CLASS IX**

. Find the four rational numbers and irrational numbers between

1. and ii) 1.20200200… and 1.212112111**…**

2. Find the value of 2.141414... + 4.12222…

3. Find the value of x if 

4. Rationalize i)  ii)

1. Express in form (a) 1.2353535.....(b)1.419419.... c) 0.1919191…
2. Simplify (i)  (ii) 

iii) 7 + 6

7. If  find 

1. If 

9. Simplify by Rationalize the denominator: i) 

1. Express in simple form i) 
2. Represent i) ii) on the number line
3. Find the value of a and b: = a – b
4. Simplify: i) ( 23)3/2 x (23)1/2  ii) (32 + 42)-1/2 iii) (7)1/2 3/4
5. Evaluate: i) ( )1/3 ii)( 100000)2/5 iii) (0.125)2/3
6. Simplify: 4 3 +

POLYNOMIAL:

1. Find the zeroes of (i) 

2. Find the degree of polynomial : (i)4 (ii)

(iii) 

3. Find the remainder when  is divided by (a) (x+1) (b)2x+1

4. Find the coefficient of x in the expansion of 

5. Expand a)b) (2x-3y)2 c) ( -2a+ 3b +4c)2

6. Find the product of (a) b) ( 3x +3) ( 3x +2)

7. Without actually calculating cubes find the value of:

i) (25)3 + )3+ )3 ii) ( 32)3 + (20 )3+ (12)3

8. Simplify 

1. For what value of k ,  is exactly divisible by (y+1) ?

10. Factorize i) ii)  (iii) 

1. If (x+5) is a factor of , find the other factors
2. The polynomial  and 

leaves remainder a and b respectively, when divided by (x+2).Find the value of p if a + b = 0

1. If  has (x+2) as a factor and leaves remainder 4

when divided by (x – 2).Find the values of a and b

14. If a2 +b2 +c2 =30 and a + b+ c =10 find the value of ab + bc +ac

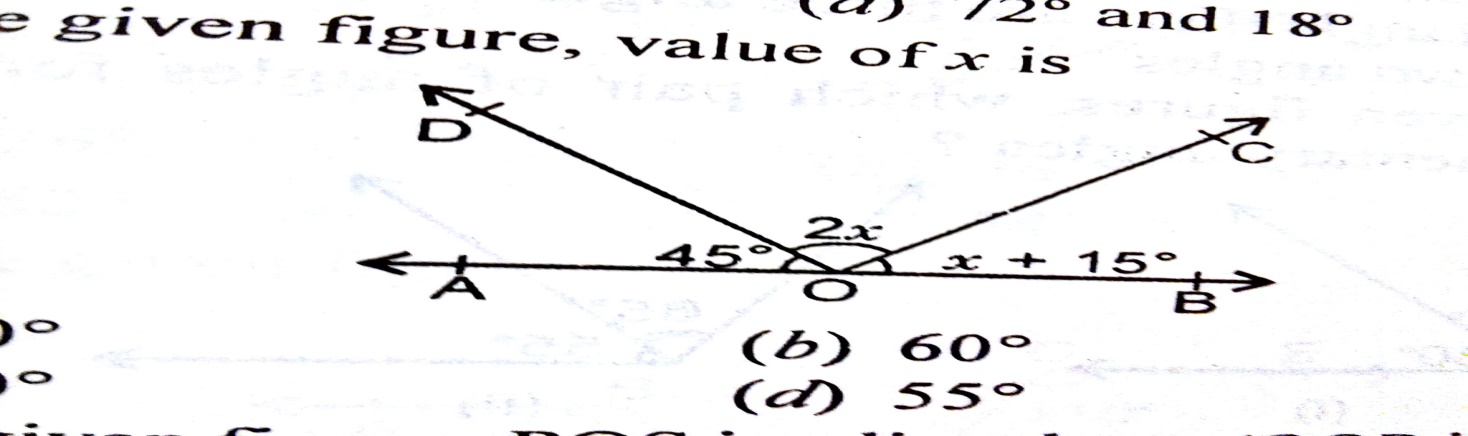
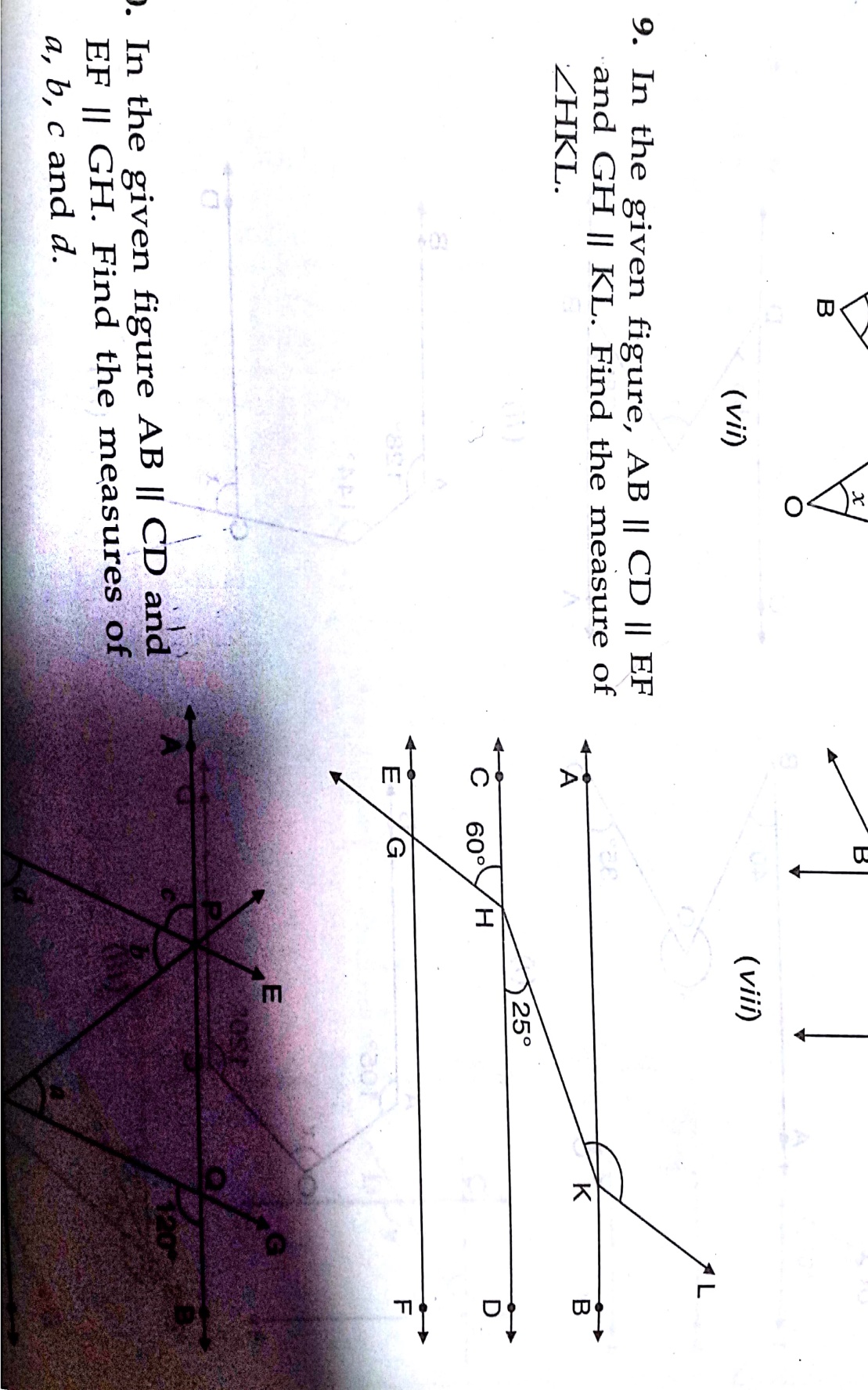
15. If a+ b=10 and a2 +b2 =58 find the value of a3+b3

1. A park is in the shape of a quadrilateral ABCD has angle C=90 ,AB=18m

BC=24 m ,CD=10 m and AD=16 m How much area does it occupy ?

1. A rhombus sheet with perimeter is 32m and one diagonal is 10 m is to be painted.the cost of painting is Rs .45 /sq.m .find the total cost of painting
2. Find the area of a triangle two sides of which are 16 cm and 22 cm and perimeter is 64 cm
3. The perimeter of a triangular field is 270 cm and its sides are in the ratio 25:17:12 .Find its area
4. Find the area of quadrilateral PQRS in which PQ=6 cm,QR=8 cm ,RS=8cm

PS=10 cm and PR =10 cm

1. The semiperimeter of a triangle is 96 cm and its sides are in the ratio 3:4:5.Find the area of the triangle
2. . In the given figure AB║CD (i) If  and find the measures of  and .
3. 2.What value of x would make AOB is a straight line?
4. 3. In The given figure, AB║DE. Prove that .
5. 4. In The given figure, AB║DE║EF and GH║KL. Find the measure .
6. 5. If two parallel lines are cut by a transversal, prove that the bisectors of the interior angles on the same side of the transversal intersect each other at right angles.
7. 6.Find the values of x,y and z in the following figures:
8. 