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**FORMATIVE ASSESSMENT –I (2016-17)**

*CLASS: IX*

**SUB: MATHS**

**TIME: 90 MINS**

**MAXIMUM MARKS: 40**

**I. MULTIPLE CHOICE QUESTIONS**

**4X1=4**

1. Which of the following is an irrational number -----

- a)  $\sqrt{4}$       b)  $\sqrt{9}$       c) -1      d)  $\sqrt{7}$

2. The degree of a constant polynomial is-----

- a) 1      b) 0      c) -1      d) 2

3. The coefficient of “t” from the expression  $1+ t^3 -t^2 -t$  is-----

- a) 1      b) 0      c) -1      d) 2

4. The reflex angle of  $60^\circ$  is -----

- a)  $120^\circ$       b)  $300^\circ$       c)  $305^\circ$       d)  $360^\circ$

**II. Very short answer questions**

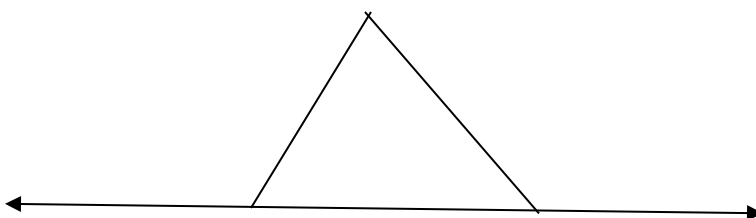
**4X2=8**

5. Visualize 4.26 on number line, using successive magnification?

6. Factorise  $9x^2 +6xy+y^2$ ?

7. Write any four axioms of Euclid’s with examples?

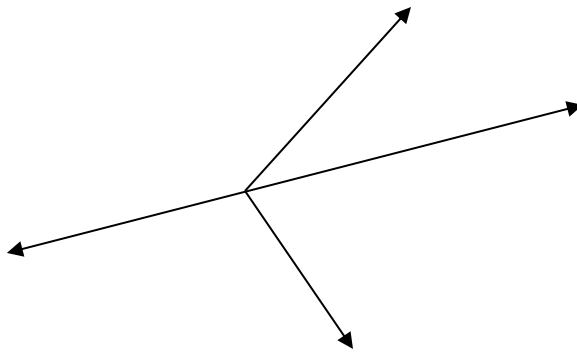
8. In given figure,  $\angle LPQR = \angle LPRQ$ , then prove that  $\angle LPQS = \angle LPRT$



### III.Short answer questions

4X3=12

9. Show how  $\sqrt{5}$  can be represented on the number line?
10. Area of rectangle is  $25a^2-35a+5$  then find the dimensions of rectangle.
- 11 write five postulates of Euclid s with neat diagram.
12. In figure, if  $x+y = w+z$ , then prove that AOB is a line.



### IV.Long answer questions

4X4=16

13. Verify that  $x^3+y^3+z^3-3xyz = \frac{1}{2}(x+y+z)[(x-y)^2+(y-z)^2+(z-x)^2]$ .
14. Expand each of the following, using suitable identities:
- a)  $(2x-y+z)^2$     b)  $(-12)^3+(7)^3+(5)^3$
15. Define a) Adjacent angles b) linear pair of angles c) complementary & supplementary angles?
16. If both a and b are rational numbers then find the values of a and b from the following:

$$\frac{3 + \sqrt{7}}{3 - \sqrt{7}} = a + b\sqrt{7}$$

BLUEPRINT

SUB: MATHS

CLASS: VII

S.NO	CHAPTER	MCQ(5)	VSA(4)	SA(5)	LA(3)	TOTAL MARKS
1	COMPARING QUANTITIES	1(1)	2 (2)	1(3)	1(4)	12
2	RATIONAL NUMBERS	2(1)	1(2)	2(3)	1(4)	14
3	ALGEBRAIC EXPRESSIONS	2(1)	1(2)	2(3)	1(4)	14
TOTAL		5(1)	4(2)	5(3)	3(4)	40