INDIAN SCHOOL SOHAR
FORMATIVE ASSESSMENT- 2
MATHEMATICS

STD IX   **Marks : 20**
02-06-14   **Time   : 40min**

General Instructions:
All questions are compulsory
This question paper consists of **9** questions divided into four sections **A** , **B** , **C** and **D**
Section A comprises of **3** questions of **1 mark** each
Section B comprises of **2** questions of **2 mark** each
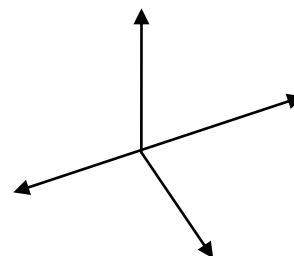**Section C** comprises of **3** questions of **3 mark** each
Section D comprises of **1** question of **4 mark**

SECTION A

1. Find the value of k for which (x+1) is a factor of the polynomial $x^3 + x^2 + x + k$

2. Expand using suitable identity : $(x+2y-z)^2$

3. State any two Euclids axioms

SECTION B

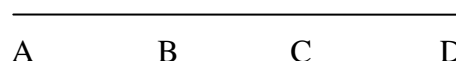4. In this fig. if a+b = c+d , then prove that POR is a line

5. If a point C lies between two points A and B such that

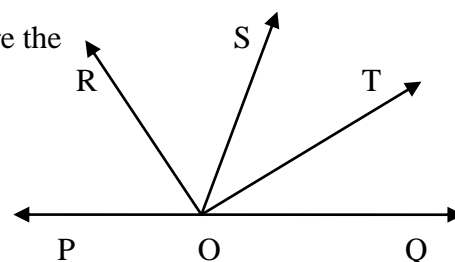   AC = BC, then prove that AC = $\frac{1}{2}$ AB. Explain by drawing the fig.

SECTION C

6. If 2x−a = 3, then prove that $8x^3 - a^3 - 27 = 18ax$

7. In the fig. if AC = BD, then prove that AB = CD

    A   B   C   D

8. In the fig. ray OS stands on a line POQ. Ray OR and ray OT are the
   angle bisectors of $\angle POS$ and $\angle SOQ$, respectively.
   If $\angle POS = x$, find $\angle ROT$

SECTION D

9. Factorise : $2x^3 - 5x^2 - 19x + 42$

****** **THE END** ******