

IMPORTANT QUESTIONS FOR SECTION C

IX MATH

1. Factorize any three:

i)
$$a^2 + 0.4a + 0.04$$
 (ii) $(2x + z)^2 - (2x - z)^2$ (iii) $4t^4 + 625$ (iv) $y^2 + 3y - 10$ (v) $8x^3 + 12^2y + 6xy^2 + y^3$ (vi) $1000 - \frac{x^3 y^3}{125}$

- 2. Solve by graphical method: 3x-11=y, x-3y=9
- 3. In a correspondence of two triangle, if three sides of one triangle are congruent to the corresponding three sides of the other, the two triangles are congruent.
- 4. Do the points A(-1,2), B(7,5) and C(2,-6) form a right angled triangle.
- **5.** Solve the following equation

$$\frac{2x+3}{x+1} + 6\left(\frac{x+1}{2x+3}\right) = 7$$

$$\sqrt{x-2} = 8 - x$$

$$OR$$

6. Ali scored 66 and 72 marks respectively. For his two tests, what is the lowest marks he must have scored for his third test if an average score of at least 75 is required to qualify for a bonus prize.