Class: VIII   **Subject:Mathematics**

1. How many sides does a regular polygon have if each of its interior angles is 165°?

2. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all?

3. Find the cube root of 10648 by prime factorisation method.

4. A playground is in the form of a rectangle ATEF. Two players are standing at the points F and B where EF = EB. Find the values of x and y.

5. By which smallest natural number 392 must be multiplied so as to make the product a perfect cube ?

6. The population of a place increased to 54000 in 2003 at a rate of 5% per annum. What would be its population in 2006 ?

7. A sum of Rs 10,000 is borrowed at a rate of interest 15%p.a. for 2 years. Find simple interest and the amount to be paid at the end of 2 years.

8. There are 100 students in a hostel. Food provision for them is for 20 days. How long will these provisions last, if 25 more students join the group?

9. The digits of a two-digit number differ by 3. If digits are interchanged and the resulting number is added to the original number, we get 121. Find the original number.

10. The lateral surface area of a hollow cylinder is 4224 cm². It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimetre of rectangular sheet.

11. Fectorise (i) $(l + m)^2 – (l – m)^2$ (ii) $25a^2 – 4b^2 + 28bc – 49c^2$