

Class: IX

Formative Assessment - I

Sub: MATHEMATICS

marks: 25

I. Solve any 3 of the following problems. 3 x 4 = 12

1. Rationalize the denominator of $(\sqrt{7} - \sqrt{5}) / (\sqrt{7} + \sqrt{5})$.
2. Visualise 2.874 on the number line, using successive magnification.
3. Find the value of $\sqrt{5}$ upto 3 decimal places.
4. Simplify : $4\sqrt{81} - 8\sqrt{343} + 15\sqrt{32} + \sqrt{225}$.

II. Answer any 3 of the following questions. 3 x 2 = 6

5. Find : $(64)^{1/6}$.
6. Simplify: $(\sqrt{11} + \sqrt{7})(\sqrt{11} - \sqrt{7})$.
7. Find an irrational number between $5/7$ and $7/9$.
8. Express 15.4 in p/q form.

III. Fill in the blanks. 4 x 1/2 = 2

1. Decimal form of $32/5$ is _____
2. Rationalizing factor of $7 + 4\sqrt{3}$ is _____
3. $(\sqrt{a} + \sqrt{b})(\sqrt{a} - \sqrt{b}) =$ _____
4. $a^p \times a^q =$ _____