## **ATOMIC ENERGY CENTRAL SCHOOL, MYSORE**

SUBJECT <u>:</u> MATHEMATICS	CHAPTER: NUMBER SYSTEM	
STD: IX	WORK SHEET :1	MAX. MARKS:15

## WORKED OUT EXAMPLES:

1. Find four rational numbers between -2 and -1.

Ans.  $-2x_5^{\frac{5}{5}} = \frac{-10}{5}$ :  $-1x_5^{\frac{5}{5}} = \frac{-5}{5}$ ; four numbers  $\frac{-9}{5}$ ,  $\frac{-8}{5}$ ,  $\frac{-7}{5}$ ,  $\frac{-6}{5}$ .

2. Find four irrational numbers between 1.2 and 1.3.

Ans: 1.22333444555....., 1.2323323332333....., 1.2909009000999...., 1.2989879876.....

3. Give an example of product of two irrational numbers being rational.

Ans. √5 x √5 =5

4. Find the simplest form of  $\sqrt{32}$ . Ans.  $\sqrt{32} = \sqrt{16} x\sqrt{2} = 4\sqrt{2}$ 

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Answer the following questions.

1. Define an irrational number.	(1 mark)
2. Is the set of rational numbers closed under the operation division?	(1mark)
3. Is ∏ a rational number? Explain.	(1 mark)
4. Find four rational numbers between $rak{3}$ and 3/5 .	(2marks)
5. Find four irrational numbers between 0.25 and 0.26	(2 marks)
6. Give an example of (i) sum of two irrational numbers being rational.	
(ii) sum of two irrational numbers being irrational	(2 marks)
7.Find the simplest form of $V600$ , $V9408$ and $V2048$ .	(3 marks)
8. Represent √5 on the number line.	(3 marks)

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