## **VIVEK TUTORIALS**

Mathematics Practice Test Max Marks: 138

Date :	//Apr/2019     Grade: 8th (ICSE)       Rational Numbers	Time: 2Hrs
1.	That should be subtracted from $-\frac{3}{8}$ to get $\frac{5}{6}$ ?	3
2.	dd the following ) $\frac{4}{7}$ and $\frac{5}{7}$ (ii) $\frac{7}{-13}$ and $\frac{4}{-13}$	3
3.	Cost of $3\frac{2}{5}$ metre of cloth is rs88 $\frac{1}{2}$ . What is the cost of 1 metre of cloth?	3
4.	he sum of the two rational numbers is $=\frac{-2}{2}$ . If one of them is $\frac{-8}{15}$ , find the other	r. 3
5.	valuate: $)\frac{5}{-11} + 0$ (ii) $2 + \frac{-3}{5}$	3
6.	y what number should $\frac{-8}{13}$ be multiplied to get 16?	3
7.	he product of two numbers is $-\frac{4}{9}$ . If one of them is $\frac{-2}{27}$ , find the other.	3
8.	sert one rational number between	3
9.	valuate: $)\frac{2}{3} - \frac{-4}{5}$ (ii) $\frac{-4}{9} - \frac{2}{-3}$	3
10.	ivide the sum of $\frac{3}{7}$ and $\frac{-5}{14}$ by $-\frac{1}{2}$ .	3
11.	$3\frac{1}{2}$ litres of milk costs Rs 49. find the cost of one litre of milk?	3
12.	sert one rational number between	3
13.	dd each pair of rational numbers, given below, and show that their addition (sum) is also mber: $9 = \frac{9}{4}$ and $\frac{-3}{-3}$ (ii) $\frac{7}{-3}$ and $\frac{8}{-3}$	a rational 3
14.	-4 8 $-18$ 27 ind three rational numbers between -2 and -1.	3

15.	In a class of 56 students, the number of boys is $\frac{2}{5}$ th of the number of girls.	3
	Find the number of boys and girls.	
16.	Represent the following rational numbers on the number line:	3
	(i) $\frac{-9}{7}$ (ii) $\frac{-2}{-5}$	
17.	Divide the sum of $\frac{-13}{8}$ and $\frac{5}{12}$ by their difference.	3
18.	Multiply:	3
	(i) $\frac{-7}{8}$ and 4 (ii) $\frac{-36}{-7}$ and $\frac{-9}{-28}$	
19.	Multiply and express the result in lowest form: 6 -14	3
	(i) $\frac{6}{-7} \ge \frac{14}{30}$ (ii) $6\frac{2}{3} \ge 1\frac{2}{7}$	
20.	Sum of two rational numbers is $\frac{3}{5}$ . If one of them is $\frac{-2}{7}$ , find the other.	3
21.	-7 5	3
	Which rational number should be added to $\frac{1}{8}$ to get $\frac{1}{9}$ ?	
22.	Add each pair of rational numbers, given below, and show that their additiion (sum) is also a rational number:	3
	(i) $\frac{7}{12}$ and $\frac{3}{2}$ (ii) $\frac{2}{12}$ and 2	
23.	15 5 5 Subtract:	3
201	(i) $2\frac{3}{5}$ from $\frac{-3}{5}$ (ii) $\frac{-4}{5}$ from $3\frac{5}{5}$	U
	$(1) \frac{2}{5} = \frac{10}{7} = \frac{10}{9} = \frac{10}{8}$	_
24.	Evaluate: $5 -13$	3
	(i) $\frac{1}{18} - \frac{1}{9}$ (ii) $\frac{1}{21} - \frac{1}{42}$	
25.	Use rational numbers $\frac{4}{9}$ and $\frac{-7}{12}$ to verify the commutative property for the addition of rational	3
26	numbers. Using distributivity find	3
20.	$\left[ \left[ 7  \left( -3 \right) \right]  \left[ 7  5 \right] \right]$	5
	$ (1) \left\{ \frac{-1}{5} \times \left( \frac{1}{12} \right) \right\}^{+} \left\{ \frac{-1}{5} + \frac{1}{12} \right\} $	
	(ii) $\left\{\frac{9}{16} \times \frac{4}{12}\right\} + \left\{\frac{9}{16} + \left(\frac{-3}{9}\right)\right\}$	
27.	The sum of two rational numbers is $\frac{9}{20}$ . If one of them is $\frac{2}{5}$ , find the other.	3
28.	By what mumber must 5 he multiplied as that the number is 3	3
•	by what number must $-8$ be multiplied, so that the product is $-3$ .	~
29.	Add each pair of rational numbers, given below, and show that their addition (sum) is also a rational number:	3

(i) 
$$\frac{6}{11}$$
 and  $\frac{-9}{11}$  (ii)  $\frac{5}{-26}$  and  $\frac{8}{39}$   
30. Evaluate: 3  
(i)  $-5 + \left(-\frac{10}{11}\right)$  (ii)  $\frac{-7}{11} + \left(\frac{-3}{44}\right)$   
Questions 3  
31. For each set of rational numbers, given below, verify the associative property of addition of rational numbers:  
 $-1, \frac{5}{6}$  and  $\frac{-2}{3}$   
32. A mother and her two sons got a room constructed for Rs 60,000. The elder son contributes  $\frac{3}{8}$  of his mother's contribution while the younger son contributes  $\frac{1}{2}$  of his mother's share. How much do the three contribute individually?  
33. Represent  $\frac{1}{2}$  and  $-\frac{3}{2}$  on a number line.  
34. If  $p = \frac{-8}{27}$ ,  $q = \frac{3}{4}$  and  $r = \frac{-12}{15}$ , then verify that (i)  $p x (q, r) = (p x q) x r$  (ii)  $p x (q, r) = \overline{p} x q - p x r$   
(i)  $\frac{4}{7} + 0 + \frac{8}{9} + \frac{-13}{7} + \frac{17}{9}$  (ii)  $\frac{3}{8} + \frac{-5}{12} + \frac{3}{7} + \frac{3}{12} + \frac{-5}{8} + \frac{-2}{7}$   
35. Evaluate: 4  
(i)  $\frac{4}{7} + 0 + \frac{8}{9} + \frac{-13}{7} + \frac{17}{9}$  (ii)  $\frac{3}{8} + \frac{-5}{12} + \frac{3}{7} + \frac{3}{12} + \frac{-5}{8} + \frac{-2}{7}$   
36. Use rational numbers.  
37. Using the appropriate properties of operations of rational numbers, evaluate the following: 4  
(i)  $\frac{2}{5} x + \frac{3}{7} - \frac{1}{14} - \frac{3}{7} x + \frac{3}{5}$   
(ii)  $\frac{8}{9} x + \frac{4}{5} - \frac{5}{6} - \frac{9}{5} x = \frac{8}{9}$   
38. For each set of rational numbers, given below, verify the associative property of addition of rational numbers;  $-\frac{2}{7}, \frac{4}{15}$  and  $\frac{7}{10}$   
39. If  $p = -\frac{2}{3}, q = \frac{4}{5}$  and  $r = \frac{-7}{12}$ , then verify that  $(p+q) + r \neq p + (q+r)$ .  
40.  $5 - 2^{8} x - 5 - 11$ 

Sum the sum of  $\frac{-5}{7}$  and  $\frac{-8}{3}$  from the sum of  $\frac{5}{2}$  and  $\frac{-11}{12}$ .

- <sup>41.</sup> Divide the sum of  $\frac{5}{8}$  and  $\frac{-11}{12}$  by the difference of  $\frac{3}{7}$  and  $\frac{5}{14}$ .
- 42. Insert three rational numbers between (i) 3 and 4 (ii) 10 and 12

----- All the Best ------

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