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Home Assignment

Class VII

Ch-9 Rational no.'s

Q1. Arrange the following rational no.'s in ascending order

$-\frac{9}{10}, -\frac{5}{20}, \frac{7}{12}, \frac{2}{5}$  [Ans  $\rightarrow -\frac{9}{10} < -\frac{5}{20} < \frac{2}{5} < \frac{7}{12}$ ]

Q2. Arrange the following rational no.'s in descending order

$\frac{7}{9}, \frac{5}{6}, \frac{11}{12}, -\frac{1}{3}, -\frac{5}{6}$  [Ans  $\rightarrow \frac{11}{12} > \frac{5}{6} > \frac{7}{9} > -\frac{1}{3} > -\frac{5}{6}$ ]

Q3. Add  $-\frac{1}{12}, \frac{3}{8}, -\frac{5}{6}$  [Ans  $\rightarrow -\frac{13}{24}$ ]

Q4. Suman reads  $\frac{1}{3}$  of a storybook on the first day and  $\frac{1}{4}$  of the book on the second day. What part of the book is yet to be read by Suman?

[Ans  $\leq 1 - \frac{1}{3} - \frac{1}{4} = \frac{5}{12}$   
 $\leq 2$  yet to be read  
 $1 - \frac{7}{12} = \frac{5}{12}$ ]

Q5. What should be added to

$(\frac{1}{3} + \frac{1}{4} + \frac{1}{5})$  to get 4? [Ans  $3\frac{13}{60}$ ]

Q6. If 35 shirts of equal size can be stitched from  $\frac{49}{2}$  m of cloth, calculate the length of cloth required for each shirt

[Ans  $\frac{7}{10}$  m]

Q7. Divide the sum of  $\frac{12}{5}$  and  $\frac{13}{7}$  by the product of

$-\frac{4}{7}$  and  $-\frac{1}{2}$

[Ans  $14\frac{9}{10}$ ]

Q8. Write two rational no.'s b/w  $\frac{1}{4}$  and  $\frac{1}{5}$

[Ans  $\frac{14}{60}, \frac{13}{60}$ ]

Q9. Divide the sum of  $\frac{55}{12}$  and  $\frac{7}{3}$  by their difference

[Ans  $\frac{83}{27}$ ]

Q10. The product of two rational no.'s is  $\frac{6}{10}$ . If one of them is  $-\frac{5}{35}$  find the other

[Ans  $-\frac{21}{5}$ ]

Q11 Simplify

(i)  $-\frac{8}{18} \times \frac{54}{32} \times -\frac{8}{28}$

[Ans (i)  $\frac{3}{14}$ ]

(ii)  $\frac{5}{36} + -\frac{6}{18} - \frac{8}{24}$

(ii)  $-\frac{19}{36}$

(iii)  $(-\frac{8}{21} \times \frac{27}{-8}) - (2 \times \frac{3}{4}) + (\frac{5}{2} \times \frac{1}{4})$

(iii)  $\frac{23}{56}$

Q12 What should be subtracted from  $-\frac{8}{9}$  to get 0?

[Ans  $-\frac{8}{9}$ ]

Q13 List eleven rational no.'s b/w -4 and -3

[Ans  $-\frac{47}{12}, -\frac{46}{12}, -\frac{45}{12}, -\frac{44}{12}, -\frac{43}{12}, -\frac{42}{12}, -\frac{41}{12}, -\frac{40}{12}, -\frac{39}{12}, -\frac{38}{12}, -\frac{37}{12}$ ]

Q14 Subtract the sum of  $\frac{5}{7}$  and  $-\frac{9}{14}$  from the sum of  $-\frac{3}{7}$  and  $\frac{11}{28}$

[S1  $\rightarrow \frac{1}{14}$ , S2  $\frac{1}{28}$   
S3  $\frac{1}{28} - \frac{1}{14} = -\frac{3}{28}$ ]

Q15 Find  $(a+b) \div (a-b)$

if  $a = \frac{5}{4}$ ,  $b = -\frac{1}{3}$  [Ans  $\frac{11}{19}$ ]

Q16 By what no. should  $-\frac{16}{21}$  be divided so that the quotient is  $-\frac{4}{7}$

[Ans  $\frac{4}{3}$ ]

Q17 If 12m of a uniform iron rod weighs  $21\frac{3}{5}$  kg then find the weight of 1m of the same rod.

[Ans  $\frac{9}{5}$  kg]

Q18 Multiply  $-3\frac{4}{17}$  and  $-\frac{85}{33}$  & Express the result as a mixed fraction

[Ans  $8\frac{1}{3}$ ]

Q19 Find x such that  $-\frac{3}{8}$  and  $\frac{x}{-24}$  are equivalent rational no.

[Ans 9]

Q20 Simplify  $(-\frac{3}{8} \times \frac{5}{6}) - (\frac{2}{3} - \frac{-3}{4})$

[Ans  $-\frac{101}{48}$ ]