S.B.I.O.A. SENIOR SECONDARY SCHOOL, TRICHY – 07

CLASS: VIII **MATHEMATICS** **DATE: 19.05.2020**

NAME: **REVIEW WORKSHEET – 1** **DAY: Tuesday**

Fill in the blanks:

01. The number of digits in Indian Number System and International Number System is …….
02. 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 are the ……..
03. The counting numbers 1, 2, 3, 4, … are called …….. numbers.
04. The set of all Natural numbers is denoted by the letter …….
05. The Natural numbers together with zero are called ……. numbers.
06. The set of all Whole numbers is denoted by the letter …….
07. The Whole numbers and negative numbers together are called …….
08. The set of all Integers is denoted by the letter…… or ……
09. …….. is the smallest Natural number.
10. ……... is the smallest Whole number.
11. Is it possible to find the largest Natural number? ……
12. Is it possible to find the largest Whole number? …….
13. Except …….., every Natural number has a predecessor.
14. Except …….., every Whole number has a predecessor.
15. All Natural numbers are …….. numbers.
16. All Whole numbers are …….. Natural numbers.
17. Z^+ denotes the set of all ……. Integers.
18. Z^- denotes the set of all ……. Integers.
19. All positive integers are …… than zero.
20. All negative integers are …… than zero.

S.B.I.O.A. SENIOR SECONDARY SCHOOL, TRICHY – 07

CLASS: VIII **MATHEMATICS** **DATE: 29.05.2020**

NAME: **RATIONAL NUMBERS WORKSHEET – 2** **DAY: Friday**

Fill in the blanks:

01. A number of the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$ is called a

    …….. number.

02. The set of all rational numbers is denoted by the letter ……..

03. Q = The set of all rational numbers

    = { $\frac{p}{q}$ / p, q ∈ ……. & q …… 0}

04. ……. is a special rational number.

05. Zero can be written as 0 = $\frac{0}{q}$ where q ≠ …….

06. The sum of any two rational numbers is always a …… number.

    Therefore the rational numbers are closed under …….

07. For any two rational numbers $\frac{p}{q}$ and $\frac{r}{s}$, $\frac{p}{q} + \frac{r}{s}$ is also a ……. number.

08. Is $\frac{13}{0}$ a rational number? ……. Reason: ……..

09. Is $\frac{0}{0}$ a rational number? …… Reason: ……..

10. Are 70,30,276 rational numbers? …….. Reason: …….

Answer the following:

Prove that the rational numbers are closed under addition. *(Hint: Consider any two rational numbers)*

S.B.I.O.A. SENIOR SECONDARY SCHOOL, TRICHY – 07

CLASS: VIII **MATHEMATICS** **DATE: 04.06.2020**

NAME: **RATIONAL NUMBERS WORKSHEET – 3** **DAY: Thursday**

Fill in the blanks:

01. The difference between any two rational numbers is always a …… number. Therefore the rational numbers are closed under …….

02. For any two rational numbers $\frac{p}{q}$ and $\frac{r}{s}$, $\frac{p}{q} - \frac{r}{s}$ is also a …….. number.

03. The product of any two rational numbers is always a …… number. Therefore the rational numbers are closed under …….

04. For any two rational numbers $\frac{p}{q}$ and $\frac{r}{s}$, $\frac{p}{q} \times \frac{r}{s}$ is also a …….. number.

05. The division of any …… rational numbers is always a rational number. Therefore the collection of non-zero rational numbers are closed under ……

06. If $\frac{p}{q}$ and $\frac{r}{s}$ are two rational numbers, such that $\frac{r}{s}$ …… 0, then $\frac{p}{q} \div \frac{r}{s}$ is also a rational number.

07. Add: $\left(\frac{3}{8}\right) + \left(\frac{-5}{8}\right)$

08. Add: $\left(\frac{-2}{11}\right) + \left(\frac{3}{11}\right) + \left(\frac{-4}{11}\right)$

09. Add $\frac{-4}{9}$ and $\frac{5}{18}$

10. Add $\frac{-3}{8}$, $\frac{-1}{2}$ and $\frac{5}{6}$

11. Subtract: $\left(\frac{6}{35}\right) - \left(\frac{-8}{25}\right)$

12. Subtract: $\left(\frac{-3}{4}\right) - \left(\frac{6}{7}\right)$

13. Subtract $\frac{-14}{39}$ from $\frac{-6}{13}$

14. Subtract $\left(\frac{-7}{26}\right)$ from $\frac{11}{39}$

15. Multiply $\frac{-3}{7}$ and $\frac{7}{8}$

16. Multiply $\frac{-6}{11}$ and $\frac{55}{12}$

17. Multiply $\frac{9}{5}, \frac{-10}{3}$ and $\frac{15}{18}$

18. Find the product of $\frac{-5}{6}$ and $\frac{4}{-15}$

19. Find the product of $\frac{-50}{7}$ and $\frac{21}{10}$

20. Find the product of $\frac{-8}{25}, \frac{-5}{16}$ and $\frac{-30}{12}$

21. Divide: $\frac{-8}{35} \div \frac{-6}{30}$

22. Divide: $\frac{-3}{4} \div \frac{13}{40}$

23. Divide $\frac{-4}{9}$ by $\frac{-16}{3}$

24. Divide $\frac{3}{90}$ by $\frac{13}{40}$

25. Divide $\frac{2}{3}$ by $\frac{-15}{20}$

Answer the following: *(Hint: Consider any two rational numbers)*

01. Prove that the rational numbers are closed under subtraction.

02. Prove that the rational numbers are closed under multiplication.

03. Prove that the non-zero rational numbers are closed under division.

S.B.I.O.A. SSENIOR SECONDARY SCHOOL, TRICHY – 07

CLASS: VIII **MATHEMATICS** **DATE: 11.06.2020**

NAME: **RATIONAL NUMBERS WORKSHEET – 4** **DAY: THURSDAY**

Fill in the blanks:

01. The two rational numbers can be added in any ……..

02. Addition is commutative for ……. numbers.

03. For any two rational numbers $\frac{p}{q}$ and $\frac{r}{s}$, $\frac{p}{q}+\frac{r}{s}$ = …….. + $\frac{p}{q}$

04. Subtraction is …….. commutative for rational numbers.

05. Multiplication is commutative for …… numbers.

06. For any two rational numbers $\frac{p}{q}$ and $\frac{r}{s}$, $\frac{p}{q}\times\frac{r}{s}$ = …….. × $\frac{p}{q}$

07. $\frac{-7}{5}+\frac{6}{7}=\frac{6}{7}+$ ……

08. $\frac{9}{10}+$ …… = $\frac{5}{11}+$ ……

09. $0+\frac{12}{11}$ = …….. + 0

10. $\left(\frac{-u}{v}\right)+\frac{w}{x}=\frac{w}{x}+$ ……

11. $\frac{l}{m}+\left(\frac{-p}{q}\right)=\left(\frac{-p}{q}\right)+$ ……

12. $\frac{a}{b}+0=0+$ ……..

13. $\left(\frac{-14}{3}\right)+\left(\frac{2}{3}\right)$ …… $\left(\frac{2}{3}\right)+\left(\frac{-14}{3}\right)$

14. $\left(\frac{-14}{3}\right)-\left(\frac{2}{3}\right)$ …… $\left(\frac{2}{3}\right)-\left(\frac{-14}{3}\right)$

15. $\frac{99}{2}-\left(\frac{-6}{7}\right)$ …… $\left(\frac{-6}{7}\right)-\frac{99}{2}$

16. $\left(\frac{-102}{17}\right)$ …… $\left(\frac{12}{17}\right)$ …… $\left(\frac{12}{17}\right)-\left(\frac{-102}{17}\right)$

17. $\left(\frac{44}{21}\right)-\left(\frac{11}{9}\right)\neq\left(\frac{11}{9}\right)$ …….. $\left(\frac{44}{21}\right)$

18. $\left(\frac{111}{30}\right)-\left(\frac{84}{6}\right)$ ..... $\left(\frac{84}{6}\right)-\left(\frac{111}{30}\right)$

19. $\left(\frac{-a}{b}\right)-\left(\frac{-c}{d}\right)\neq$ …….. $-\left(\frac{-a}{b}\right)$

20. $0 \times \frac{1}{7} = \ldots\ldots \times 0$

21. $\frac{5}{9} \times \frac{18}{25} = \frac{18}{25} \times \ldots\ldots\ldots$

22. $\frac{-27}{81} \times \frac{33}{11} = \ldots\ldots\ldots = \frac{33}{11} \times \frac{-27}{81}$

23. $\frac{0}{14} \times \frac{-14}{28} = \ldots\ldots\ldots = \frac{-14}{28} \times \ldots\ldots\ldots\ldots$

24. $\frac{2}{8} \times \frac{5}{10} = \ldots\ldots\ldots\ldots = \frac{5}{10} \times \frac{2}{8}$

25. $\frac{a}{b} \times \frac{c}{d} = \ldots\ldots\ldots\ldots = \frac{c}{d} \times \frac{a}{b}$

Answer the following: *(Hint: Consider any two rational numbers)*

01. Prove that the addition is commutative for rational numbers.

02. Prove that the subtraction is not commutative for rational numbers.

03. Prove that the multiplication is commutative for rational numbers.