



# पुणना International School

Shree Swaminarayan Gurukul, Zundal

## WORKSHEET - 1

Class 8

CHAPTER – 1 RATIONAL NUMBER

### I. MULTIPLE CHOICE QUESTION:

- The sum of the rational numbers  $-\frac{8}{19}$  and  $-\frac{4}{57}$  is \_\_\_\_\_  
(a)  $-\frac{5}{57}$             (b)  $\frac{7}{22}$             (c)  $-\frac{28}{57}$             (d)  $\frac{4}{27}$
- What number should be added to  $\frac{3}{8}$  to get  $-\frac{1}{24}$ ?  
(a)  $-\frac{5}{12}$             (b)  $-\frac{7}{23}$             (c)  $\frac{31}{72}$             (d)  $\frac{2}{33}$
- Which of the rational numbers  $\frac{4}{9}$ ,  $-\frac{5}{6}$ ,  $-\frac{7}{-12}$  and  $\frac{11}{-24}$  is the smallest?  
(a)  $\frac{4}{9}$             (b)  $-\frac{5}{6}$             (c)  $-\frac{7}{-12}$             (d)  $\frac{11}{-24}$
- Which of the rational numbers  $-\frac{4}{9}$ ,  $\frac{5}{-12}$ ,  $\frac{7}{-18}$ ,  $\frac{2}{-3}$  is the greatest?  
(a)  $\frac{7}{-18}$             (b)  $-\frac{4}{9}$             (c)  $\frac{2}{-3}$             (d)  $\frac{5}{-12}$
- Simplify:  $\frac{2}{3} + -\frac{4}{5} + \frac{7}{15} + -\frac{11}{20}$   
(a)  $-\frac{1}{5}$             (b)  $-\frac{13}{60}$             (c)  $-\frac{4}{15}$             (d)  $-\frac{7}{30}$
- What number should be subtracted from  $-\frac{3}{4}$  so as to get  $\frac{5}{6}$ ?  
(a)  $-\frac{3}{10}$             (b)  $-\frac{5}{24}$             (c)  $-\frac{19}{12}$             (d)  $\frac{9}{25}$
- Which of the following rational numbers is in the standard form?  
(a)  $-\frac{9}{28}$             (b)  $-\frac{26}{78}$             (c)  $-\frac{14}{16}$             (d)  $\frac{48}{-96}$
- The sum of two rational numbers is  $-7$ . If one of the numbers is  $-\frac{15}{19}$ , the other number is \_\_\_\_\_  
(a)  $-\frac{21}{10}$             (b)  $-\frac{57}{16}$             (c)  $\frac{7}{9}$             (d)  $-\frac{118}{19}$
- Which of the following forms a pair of equivalent rational numbers?  
(a)  $\frac{24}{40}$  and  $\frac{35}{50}$     (b)  $-\frac{25}{35}$  and  $\frac{55}{-77}$     (c)  $-\frac{8}{15}$  and  $-\frac{24}{48}$   
(d)  $\frac{9}{72}$  and  $-\frac{3}{21}$
- The value of  $\{-\frac{8}{13} \times \frac{26}{-3}\}$  is \_\_\_\_\_

(a)  $-8/13$       (b)  $2/6$       (c)  $-4/13$       (d)  $16/3$

**11.** The reciprocal of a negative rational number \_\_\_\_\_

- (a) is a positive rational number
- (b) is a negative rational number
- (c) can be either a positive or a negative rational number
- (d) does not exist

**12.** The value of  $(-16/21 \div -4/3)$  is \_\_\_\_\_

(a)  $-3/10$       (b)  $-7/21$       (c)  $4/7$       (d)  $-7/6$

**13.** Fill in the blanks:  $5/12 \div (\text{_____}) = -35/18$

(a)  $-21/36$       (b)  $-12/19$       (c)  $-5/18$       (d)  $-3/14$

**14.** The product of two numbers is  $-20/9$ . If one of the numbers is 4, find the other.

(a)  $-5/9$       (b)  $3/11$       (c)  $12/39$       (d)  $-9/11$

**15.** Add the following rational numbers:

- (i)  $-2/5$  and  $4/5$       (ii)  $-6/11$  and  $-4/11$       (iii)  $-11/8$  and  $5/8$
- (iv)  $-7/3$  and  $1/3$       (v)  $5/6$  and  $-1/6$       (vi)  $-17/15$  and  $-1/15$

**16.** Subtract the first rational number from the second in each of the following:

- (i)  $3/8$ ,  $5/8$       (ii)  $-7/9$ ,  $4/9$       (iii)  $-2/11$ ,  $-9/11$
- (iv)  $11/13$ ,  $-4/13$       (v)  $1/4$ ,  $-3/8$       (vi)  $-2/3$ ,  $5/6$

**17.** Evaluate each of the following:

- (i)  $2/3 - 3/5$       (ii)  $-4/7 - 2/(-3)$       (iii)  $4/7 - (-5)/(-7)$
- (iv)  $-2 - 5/9$       (v)  $-3/-8 - (-2)/7$       (vi)  $-4/13 - (-5)/26$
- (vii)  $-5/14 - (-2)/7$       (viii)  $13/15 - 12/25$ .



# Purnima International School

Shree Swaminarayan Gurukul, Zundal

## WORKSHEET – 2

CLASS 8

CHAPTER – 1 RATIONAL NUMBER

1. Add the following rational numbers:

(i)  $5/6$  and  $7/9$

(ii)  $3/4$  and  $-3/5$

(iii)  $5/8$  and  $-7/2$

(iv)  $-8/9$  and  $11/6$

(v)  $-5/16$  and  $7/24$

(vi)  $7/-18$  and  $8/27$

2. Simplify:

(i)  $8/9 + -11/6$

(ii)  $-5/16 + 7/24$

(iii)  $1/-12 + 2/-15$

(iv)  $-8/19 + -4/57$

(v)  $7/9 + 3/-4$

(vi)  $5/26 + 11/-39$

3. Add and express the sum as a mixed fraction:

(i)  $-12/5 + 43/10$

(ii)  $24/7 + -11/4$

(iii)  $-31/6 + -27/8$

4. Subtract the first rational number from the second in each of the following:

(i)  $3/8, 5/8$

(ii)  $-7/9, 4/9$

(iii)  $-2/11, -9/11$

(iv)  $11/13, -4/13$

(v)  $1/4, -3/8$

(vi)  $-2/3, 5/6$

5. Evaluate each of the following:

(i)  $2/3 - 3/5$

(ii)  $-4/7 - 2/(-3)$

(iii)  $4/7 - (-5)/(-7)$

(iv)  $-2 - 5/9$

(v)  $-3/-8 - (-2)/7$

(vi)  $-4/13 - (-5)/26$

6. The sum of the two numbers is  $5/9$ . If one of the numbers is  $1/3$ , find the other.

7. The sum of two numbers is  $-1/3$ . If one of the numbers is  $-12/3$ , find the other.

8. The sum of the two numbers is  $-4/3$ . If one of the numbers is  $-5$ , find the other.

9. The sum of the two rational numbers is  $-8$ . If one of the numbers is  $-15/7$ , find the other.

10. What should be added to  $-7/8$  so as to get  $5/9$ ?

11. What number should be added to  $-5/11$  so as to get  $26/33$ ?

12. What number should be added to  $-5/7$  to get  $-2/3$ ?

13. What number should be subtracted from  $-5/3$  to get  $5/6$ ?

14. What number should be subtracted from  $3/7$  to get  $5/4$ ?

**15. Fill in the blanks:**

(i)  $-4/13 - (-3)/13 = \dots$

(ii)  $(-9)/14 + \dots = -1$

(iii)  $(-7)/9 + \dots = 3$

(iv)  $\dots + 15/23 = 4$

**16. Multiply each of the following rational numbers:**

(i)  $7/11$  by  $5/4$

(ii)  $5/7$  by  $(-3/4)$

(iii)  $(-2)/9$  by  $5/11$

(iv)  $-3/17$  by  $-5/-4$

**17. Find the product of each of the following:**

(i)  $3/5 \times (-7)/8$

(ii)  $(-9)/2 \times 5/4$

(iii)  $(-6)/11 \times 5/3$

(iv)  $(-2)/3 \times 6/7$

(v)  $(-12)/5 \times 10/-3$

(vi)  $25/-9 \times 3/-10$

**18. Find the reciprocal of:**

(i)  $13/25$

(ii)  $(-17)/12$

(iii)  $(-7)/24$

(iv)  $18$

(v)  $-16$

**20. Fill in the blanks:**

(i) The product of a rational number and its reciprocal is \_\_\_\_\_ .

(ii) Zero has \_\_\_\_\_ reciprocal.

(iii) The numbers \_\_\_\_\_ and \_\_\_\_\_ are their own reciprocals.

(iv) Zero is \_\_\_\_\_ the reciprocal of any number.

(v) The reciprocal of  $a$ , where  $a \neq 0$ , is \_\_\_\_\_ .

(vi) The reciprocal of  $1/a$ , where  $a \neq 0$ , is \_\_\_\_\_ .

(vii) The reciprocal of a positive rational number is \_\_\_\_\_ .

(viii) The reciprocal of a negative rational number is \_\_\_\_\_ .

(ix)  $9/8 \div (\text{_____}) = -3/2$

(x)  $(\text{_____}) \div (-7/5) = 10/19$