

WORK SHEET
SUBJECT- MATHS
CHAPTER 9– RATIONAL NUMBERS

CLASS- VII

(1) List five rational numbers between:

- (a) -1 and 0 (b) -2 and -1
 (c) $-\frac{4}{5}$ and $-\frac{2}{3}$ (d) $\frac{1}{2}$ and $\frac{2}{3}$
 (e) $\frac{2}{3}$ and $\frac{3}{4}$

(2) Write four more rational numbers in each of the following patterns:

- (i) $-\frac{3}{5}, -\frac{6}{10}, -\frac{9}{15}, -\frac{12}{20}, \dots$
 (ii) $-\frac{1}{2}, -\frac{2}{8}, -\frac{3}{12}, \dots$

(3) Give four rational numbers equivalent to

- (i) $-\frac{2}{7}$ (ii) $\frac{5}{-3}$ (iii) $-\frac{4}{9}$

(4) Draw the number line and represent the following rational numbers on it:

- (i) $\frac{3}{4}$ (ii) $-\frac{5}{8}$ (iii) $-\frac{7}{4}$ (iv) $\frac{7}{8}$

(5) Which of the following rational numbers represent the same rational numbers?

- (i) $-\frac{7}{21}$ and $\frac{3}{9}$ (ii) $-\frac{16}{20}$ and $-\frac{20}{-25}$ (iii) $-\frac{2}{-3}$ and $\frac{2}{3}$
 (iv) $-\frac{3}{5}$ and $-\frac{12}{20}$ (v) $\frac{8}{-5}$ and $-\frac{24}{15}$ (vi) $\frac{1}{3}$ and $-\frac{1}{9}$
 (vii) $-\frac{5}{-9}$ and $\frac{5}{-9}$

(6) Rewrite the following rational numbers in simplest form-

- (i) $-\frac{8}{9}$ (ii) $\frac{25}{45}$ (iii) $-\frac{44}{72}$ (iv) $-\frac{8}{10}$

(7) Solve a) $1\frac{1}{2} + \frac{3}{4}$ b) $\frac{4}{9} \times -\frac{3}{8}$ c) $\frac{3}{16} \div (-\frac{7}{20})$ (8) Salma finished her homework in $\frac{7}{12}$ hour. Vijay finished the same homework in $\frac{3}{4}$ hour. Who worked longer? By what fraction was it longer?(9) Find a) $-\frac{4}{9} \div 5$ b) $-2\frac{1}{3} + \frac{3}{5}$ c) $-2\frac{3}{5} \times 3$

(10) Arrange the following rational numbers in ascending order:

- (i) $-\frac{3}{8}, \frac{5}{6}, -\frac{6}{8}, \frac{2}{4}, -\frac{1}{3}$ (ii) $\frac{4}{6}, -\frac{3}{8}, \frac{6}{12}, -\frac{5}{16}$ (iii) $2/3, -3/4, 2/5$

(11) Simplify:

- (i) $\frac{2}{3} + \frac{1}{6} - \frac{2}{9}$ (ii) $7\frac{5}{6} - 4\frac{3}{8} + 2\frac{7}{12}$

(12) Solve:

- (i) $-\frac{7}{11} \times \frac{3}{5}$ (ii) $-\frac{3}{5} \times 25$ (iii) $-3\frac{4}{15} \times 24$
 (iv) $-3\frac{1}{8} \times 4\frac{10}{11}$ (v) $-\frac{3}{10} \div \frac{10}{3}$ (vi) $-4\frac{3}{5} \div \frac{4}{5}$
 (vii) $-5\frac{4}{7} \div 1\frac{3}{10}$ (viii) $-4 \div 2\frac{2}{5}$ (ix) $-6 \div \frac{3}{2}$

(13) Divide:

- (i) $\frac{3}{8}$ by 4 (ii) $-\frac{9}{16}$ by 6 (iii) -9 by $\frac{3}{16}$ (iv) -10 by $\frac{100}{3}$

(14) Satpal walks $\frac{2}{3}$ km from place P towards east and then from there $\frac{12}{7}$ km towards west. Where will he be now from P?(15) Multiply $-6/13$ by the reciprocal of $-7/6$
