

North-Ex Public School (Recognized), Sec-3, Rohini

**Class 7
Mathematics Worksheet (Fractions)**

Note: Before attempting the worksheet you must check links given below which will help you in solving the sums:-

1. https://youtu.be/_zMou2iExNs
2. <https://youtu.be/ZyfhCf7mJsg>

FA Worksheet 1

Maximum Marks: 10

1. Express $\frac{2}{5}$ as a rational number with
(i) denominator 40, (ii) numerator 12, (iii) numerator -16, (iv) denominator -100. [2]
2. Fill in the blanks:
(i) $\frac{2}{7} = \frac{\square}{56}$ (ii) $\frac{7}{11} = \frac{77}{\square}$ (iii) $\frac{-5}{13} = \frac{10}{\square}$ (iv) $\frac{18}{54} = \frac{\square}{-6}$ [2]
3. Simplify and express the result as a rational number in standard form:
(i) $\left(\frac{-16}{5} \times \frac{15}{24}\right) - \left(\frac{12}{4} \times \frac{-35}{3}\right)$ (ii) $\left(\frac{2}{3} + \frac{3}{2}\right) + \left(\frac{2}{3} - \frac{3}{2}\right)$
(iii) $\frac{-7}{4} + 0 + \left(\frac{-9}{10}\right) + \frac{19}{5} + \frac{11}{8}$ (iv) $\left[\frac{3}{7} - \left(\frac{-7}{9}\right)\right] - \frac{2}{14}$ [4]
4. Two friends divide ₹ $\frac{89}{5}$ equally between themselves. How much did each friend get? [2]

FA Worksheet 2

Maximum Marks: 10

1. Write any 5 rational numbers equivalent to
(i) $\frac{-4}{5}$ (ii) $\frac{5}{13}$ [4]
2. Fill in the blanks:
(i) $\frac{-4}{9} - \left(\frac{-2}{8}\right) = \square$ (ii) $\frac{-5}{14} + \square = \frac{5}{14}$ (iii) $\left(\frac{-7}{9}\right) + \square = 1$ (iv) $\frac{-2}{3} \times \square = 0$ [2]
3. Find the area of a square field with side $\frac{13}{4}$ m. [2]
4. $\frac{81}{4}$ litres of milk was poured equally into 9 small containers. How much milk will be there in each container? [2]

HOTS*

1. Insert 4 rational numbers between the multiplicative inverse of $\frac{-7}{5}$ and -2.
2. If $\frac{2}{3}$ of a number exceeds its $\frac{4}{7}$ by 1, find the number.
3. Plot $\left(\frac{8}{3} + \frac{1}{2} - \frac{13}{4}\right)$ and $\left(\frac{-1}{6}\right)$ on the same number line.

1. Multiply.

(a) 15 by $\frac{3}{105}$

(b) 17 by $\frac{-21}{84}$

(c) 0 by $\frac{-21}{36}$

(d) $\frac{331}{-441}$ by 1

(e) $\frac{7}{-3}$ by $\frac{-3}{7}$

(f) $\frac{210}{-256}$ by $-1\frac{58}{70}$

(g) $\frac{7}{5}$ by $\frac{-40}{7}$

(h) $-1\frac{2}{9}$ by $\frac{27}{55}$

2. Find the following products.

(a) $\frac{441}{250} \times \frac{37}{21} \times \frac{125}{111} \times \frac{3}{5} \times -5$

(b) $\frac{-3}{19} \times \frac{15}{61} \times 0 \times \frac{18}{31} \times \frac{9}{41}$

(c) $\frac{-7}{16} \times \frac{24}{49} \times \frac{-28}{15} \times \frac{15}{-8}$

(d) $2\frac{1}{3} \times 24\frac{6}{7} \times 18\frac{1}{3}$

3. Evaluate.

(a) $\left(\frac{6}{55} \times \frac{-22}{9}\right) - \left(\frac{26}{125} \times \frac{-10}{39}\right)$

(b) $-2\frac{1}{5} \times \left(1\frac{4}{7} - \frac{5}{21}\right)$

(c) $\left(\frac{7}{9} - \frac{11}{12}\right) \times \left(\frac{36}{5} + \frac{24}{7}\right)$

(d) $\left(\frac{2}{-3} \times \frac{7}{6}\right) + \left(\frac{-4}{15} \times \frac{-5}{-8}\right)$

4. Multiply the sum of $\frac{3}{4}$ and $\frac{7}{8}$ by the sum of $\frac{11}{13}$ and $\frac{5}{26}$.

5. Find the difference between 1 and $\frac{2}{3} \times \frac{15}{27} \times 1\frac{19}{26}$.