Worksheet

1. Choose the correct option.

   a. The fraction which is equivalent to $\frac{3}{5}$ is

      i. $\frac{7}{9}$ ii. $\frac{24}{40}$ iii. $\frac{90}{15}$ iv. $\frac{13}{15}$

   b. The reciprocal of $1\frac{1}{8}$ is

      i. $\frac{9}{8}$ ii. $\frac{8}{9}$ iii. $\frac{-9}{8}$ iv. $\frac{-8}{9}$

   c. Which among the following fractions is less than $\frac{5}{8}$?

      i. $\frac{4}{7}$ ii. $\frac{10}{13}$ iii. $\frac{7}{10}$ iv. $\frac{8}{11}$

   d. Which of the following is a proper fraction?

      i. $\frac{3}{2}$ ii. $\frac{9}{5}$ iii. $\frac{18}{7}$ iv. $\frac{17}{20}$

   e. The fraction which is equal to $\frac{9}{4}$ is

      i. $2\frac{1}{4}$ ii. $4\frac{1}{2}$ iii. $\frac{4}{9}$ iv. $\frac{2}{3}$

2. Fill in the blanks.

   a. $12 \div \frac{6}{13} = 12 \times$ _____

   b. $4 \div \frac{6}{13} \div \frac{13}{78} =$ _____

   c. The reciprocal of a mixed fraction is a _____ fraction.

   d. $0 \div \frac{5}{11} =$ _____

3. Convert the following into mixed fractions:

   a. $\frac{42}{13}$ b. $\frac{27}{8}$ c. $\frac{57}{10}$ d. $\frac{98}{15}$ e. $\frac{320}{31}$

4. Arrange the following fractions in descending order: $\frac{25}{48}, \frac{3}{8}, \frac{11}{24}, \frac{5}{12}, \frac{9}{16}$

5. Write an equivalent fraction of $\frac{120}{504}$ with

   a. 21 as denominator. b. 15 as numerator.

6. Convert the following fractions into like fractions:

   a. $\frac{5}{21}, \frac{23}{70}, \frac{5}{84}, \frac{13}{14}$ b. $\frac{4}{18}, \frac{11}{24}, \frac{7}{16}, \frac{5}{12}$

7. Insert three fractions between:

   a. $\frac{4}{5}$ and $\frac{3}{10}$ b. $\frac{1}{4}$ and $\frac{1}{5}$

8. Divide:

   a. $\frac{26}{35} \div \frac{39}{42}$ b. $\frac{63}{80} \div 3\frac{1}{16}$ c. $4\frac{7}{12} \div 8\frac{5}{9}$

9. Simplify:

   a. $\frac{5}{32} \times \frac{12}{35} \div \frac{9}{14}$ b. $\frac{18}{65} \div \frac{11}{39} \times 4\frac{8}{9}$ c. $5\frac{5}{9} \times 3\frac{3}{8} \div 9\frac{1}{7}$

10. Convert the following complex fractions into simple fractions:

    a. $\frac{\left(\frac{4}{15}\right)}{\left(3\frac{1}{5}\right)}$ b. $\frac{\left(2\frac{6}{7}\right)}{\left(2\frac{2}{14}\right)}$ c. $\frac{25}{\left(\frac{1}{5}\right)}$

11. Simplify: $\left(5\frac{1}{4} - 3\frac{1}{2}\right) \div \left(\frac{-5}{4}\right) + \frac{6}{7}$

12. Find the area of a rectangular hall of length $13\frac{1}{4}$ m and width $8\frac{2}{11}$ m.

13. How many pieces of square cloth of length $2\frac{2}{3}$ m can be cut from a square roll of cloth of length 168 m?

14. Mrs Rita baked a cake. She sent half of the cake to her children's school and gave $\frac{2}{5}$ of the leftover cake to her neighbour. What portion of the cake is left with her?

15. In a campaign of 16,870 people, $\frac{1}{5}$ are men and $\frac{1}{4}$ of what is left are women and the remaining are children. Find the number of children.

16. A man earns ₹ 65,000 per month. He spends $\frac{3}{13}$ of his income on food, $\frac{2}{5}$ of the remaining on education of his children and $\frac{1}{2}$ of the remainder on house rent. Find the amount of money left with him.

Answers to Worksheet

1. a. ii b. ii c. i d. iv e. i
2. a. $\frac{13}{6}$ b. 52 c. proper d. 0
3. a. $3\frac{3}{13}$ b. $3\frac{3}{8}$ c. $5\frac{7}{10}$ d. $6\frac{8}{15}$ e. $10\frac{10}{31}$
4. $\frac{9}{16}, \frac{25}{48}, \frac{11}{24}, \frac{5}{12}, \frac{3}{8}$ 5. a. $\frac{5}{21}$ b. $\frac{15}{63}$

6. a. $\frac{100}{420}, \frac{138}{420}, \frac{25}{420}, \frac{390}{420}$ b. $\frac{32}{144}, \frac{66}{144}, \frac{63}{144}, \frac{60}{144}$

7. a. $\frac{4}{10}, \frac{5}{10}, \frac{6}{10}$ (Answer may vary) b. $\frac{21}{100}, \frac{22}{100}, \frac{23}{100}$ (Answer may vary)

8. a. $\frac{4}{5}$ b. $\frac{9}{35}$ c. $\frac{15}{28}$

9. a. $\frac{1}{12}$ b. $\frac{24}{5}$ c. $\frac{525}{256}$

10. a. $\frac{1}{12}$ b. $\frac{4}{3}$ c. 125

11. $\frac{-19}{35}$ 12. $\frac{2385}{22}$ m^2

13. 3969 14. $\frac{3}{10}$ 15. 10122 16. ₹ 15,000