

Chapter- 9

Fractions

WORKSHEET

1. Fill in the blanks :

- a) Fractions with different denominators are unlike fractions.
- b) A mixed number is a combination of a whole number and a proper fraction.
- c) A fraction greater than 1 is always a/an improper fraction.
- d) In $\frac{17}{18}$, the numerator is 17.
- e) The lowest term of $\frac{10}{10}$ is ~~1~~ $\frac{1}{1}$.
- f) 5, one-fifth make a whole.
- g) There are one halves in $4\frac{1}{2}$.
- h) A proper fraction is always less than 1.
- i) Fractions with the same denominator are like fractions.
- j) The numbers such as half, one-third, one-fourth, two-fifth, five-sixth etc. are called fractional numbers.

2. Do as directed :

- a) Find: $\frac{3}{5}$ of 25.

Ans. $\frac{3}{5} \times \frac{25}{1} = 15$

- b) Express $\frac{19}{2}$ as mixed number.

Ans. $2\overline{)19} = 9\frac{1}{2}$

- c) Express $6\frac{2}{9}$ as improper fraction.

Ans. $\frac{56}{9}$

d) Compare and put the correct symbol (<, > or =)

$$\frac{3}{4} < \frac{2}{5}$$

Ans. $\frac{3 \div 20}{4 \div 20} = \frac{60}{80}$
 $\frac{2 \div 20}{5 \div 20} = \frac{40}{100}$
 L.C.M = 20

e) Reduce $\frac{18}{42}$ to its lowest form.

Ans. $\frac{18 \div 6}{42 \div 6} = \frac{3}{7}$
 $\begin{array}{r} 2 \overline{) 18, 42} \\ 3 \overline{) 9, 21} \\ \hline 3, 7 \end{array}$ H.C.F = 6

3. Solve as per the given instructions:

a) Add: $2 \frac{5}{13} + \frac{7}{13} + 3 \frac{9}{26}$

Ans. $\frac{31}{13} + \frac{7}{13} + \frac{87}{26}$
 $= \frac{31 \times 2 + 7 \times 2 + 87 \times 1}{26}$
 $= \frac{62 + 14 + 87}{26} = \frac{163}{26} = 6$

$$\begin{array}{r} 13 \overline{) 13, 13, 26} \\ 2 \overline{) 1, 1, 2} \\ \hline 1, 1, 1 \end{array}$$

b) Subtract $5 \frac{7}{9}$ from $9 \frac{5}{7}$

Ans. $\frac{52}{9} - \frac{68}{7}$
 $= \frac{52 \times 7 - 68 \times 9}{63} = \frac{364 - 612}{63} = \frac{248}{63}$

$$\begin{array}{r} 3 \overline{) 9, 7} \\ 3 \overline{) 3, 7} \\ 7 \overline{) 1, 7} \\ \hline 1, 1 \end{array}$$

c) Multiply: $\frac{2}{5} \times \frac{3}{4} \times \frac{1}{2}$

Ans. $\frac{2 \times 3 \times 1}{5 \times 4 \times 2} = \frac{3}{20}$

d) Simplify $\frac{3}{5} + \frac{1}{2} - \frac{1}{4}$

Ans. $\frac{3}{5} + \frac{1}{2} - \frac{1}{4} = \frac{3 \times 4 + 1 \times 10 - 3 \times 5}{20}$

$$= \frac{12 + 10 - 15}{20} = \frac{22 - 15}{20} = \frac{7}{20}$$

e) A ribbon measuring $3\frac{1}{2}$ m is cut into 7 pieces. What is the length of each piece?

Ans. A ribbon measuring ~~is~~ is $= 3\frac{1}{2} = \frac{7}{2}$ m

Cut into pieces is = 7

Length of each piece = $\frac{7}{2} \div 7$

$$\frac{\frac{7}{2} \times 1}{2 \times 7} = \frac{1}{2}$$

Hence, the length of each piece is $\frac{1}{2}$ m.
