

Chapter - 9 Worksheet Fractions



a) Fractions with different denominators are unlike fractions.
improper

b) A ~~whole~~ number is a ~~combination~~ of a whole number and a proper fraction.

c) A fraction greater than 1 is always a improper fraction.

d) In $\frac{17}{18}$, the ^{numerator} ~~number~~ is 17.

e) The lowest term of $\frac{10}{10}$ is $\frac{2}{2}$.

f) Five-sevenths, one-fifth make a whole.

g) There are 4 halves in $4\frac{1}{2}$.

h) A ~~proper~~ fraction is less than one.

i) Fractions with same denominators are like fractions.

i) The numbers such as half, one-third, one-fourth, two-fifths, five-sixths etc. are called whole numbers.

2. a) 1.5

$$b) \frac{19}{2} = \frac{2 \times 9 + 1}{2} = 9 \frac{1}{2}$$

$$\begin{array}{r} 9 \\ 2 \overline{) 19} \\ \underline{-18} \\ 1 \end{array}$$

$$c) 6 \frac{2}{9} = \frac{(6 \times 9 + 2)}{9} = \frac{54 + 2}{9} = \frac{56}{9}$$

$$\begin{array}{r} 6 \\ 9 \overline{) 54} \\ \underline{-54} \\ 2 \end{array}$$

~~$\frac{3}{4}$~~

$$d) \frac{3}{4} \circ \frac{2}{5} = \frac{3}{4} \frac{2}{5}$$

2	4, 5
2	2, 5
5	1, 5
1	1

$$L.C.M. = 2 \times 2 \times 5 = 20$$

$$= \frac{3}{4} = \frac{3 \times 5}{4 \times 5} = \frac{15}{20}$$

$$= \frac{2}{5} = \frac{2 \times 4}{5 \times 4} = \frac{8}{20}$$

$$= \frac{15}{20} > \frac{8}{20}$$

So, ~~15~~ $\frac{3}{4} > \frac{2}{5}$

e) ~~18 = 1, 2, 3, 6, 18~~

~~42 = 1, 2, 3, 6, 7, 14, 21, 42~~

~~Factors of 18 = 1, 2, 3, 6, 18~~

H.C.F. of 18 and 42 =

16 e) H.C.F. of 15 and 20 = 5

5	15, 20
	3, 4

$\begin{array}{r} 13 \\ \times 4 \\ \hline 52 \end{array}$	=	$\frac{15 \times 5}{20 \times 5} = \frac{3}{4}$
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~~3~~

$\begin{array}{r} 108 \\ \times 4 \\ \hline 432 \end{array}$	=	$\frac{108 \times 4}{432} = 1$
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2

$$3. \quad a) (2+3) + \left(\frac{5}{13} + \frac{7}{13} + \frac{9}{26} \right)$$

2	13, 13, 26
13	13, 13, 13
	1, 1, 1

$$= 5 + \frac{5 \times 2 + 7 \times 2 + 9 \times 1}{26}$$

$$L.C.M = 2 \times 13 = 26$$

$$= 5 + \frac{10 + 14 + 9}{26} = 5 + \frac{33}{26}$$

$$= 5 + 1 \frac{7}{26} = 5 + 1 + \frac{7}{26}$$

$$= 6 + \frac{7}{26} = 6 \frac{7}{26}$$

$$b) (9-5) - \left(\frac{7}{9} - \frac{5}{7} \right)$$

~~$$= 4 - \frac{7}{9} + \frac{5}{7}$$~~

$$= 4 - \frac{7 \times 7 - 5 \times 9}{63} = 4 - \frac{49 - 45}{63}$$

$$= 4 \frac{4}{63}$$

$$c) \frac{2 \times 3 \times 1}{5 \times 4 \times 2} = \frac{3}{20}$$

d) ~~Simplify~~ $\frac{3 \times 4 + 1 \times 10 - 3 \times 5}{20}$

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

$$\begin{array}{r} 2 \overline{) 5, 2, 4} \\ \underline{2 5, 1, 2} \\ 5 1, 1 \\ \underline{5, 1, 1} \\ 5, 1, 1 \end{array}$$

L.C.M. = 20

$$= \frac{7}{20}$$

e) The measuring of the ribbon
= $3 \frac{1}{2}$

The ribbon is cut into pieces = 7

What is the length of each
piece = $\frac{1}{2}$

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

So the length of each piece = $\frac{1}{2}$