Class: 4
Subject : Mathematics
Prepared by : Israt sultana
Date:14/7/2020
Lecture:4

Solution

Note 1 **Do addition.**

Solution:

(1) Solution: $\frac{1}{4}+\frac{1}{3}$

$=\frac{3}{12}+\frac{4}{12}$

$=\frac{7}{12}$

Ans: $\frac{7}{12}$

(2) Solution: $\frac{1}{4}+\frac{2}{5}$

$=\frac{5}{20}+\frac{4}{20}$

$=\frac{9}{20}$

Ans: $\frac{9}{20}$

(3) Solution: $\frac{1}{6}+\frac{2}{9}$

$=\frac{3}{18}+\frac{4}{18}$

$=\frac{7}{18}$

Ans: $\frac{7}{18}$

(4) Solution: $\frac{1}{8}+\frac{5}{6}$

$=\frac{3}{24}+\frac{20}{24}$

$=\frac{23}{24}$

Ans: $\frac{23}{24}$

Note 2 **Do subtraction.**

Solution:

(1) Solution: $\frac{1}{2}-\frac{1}{3}$

$=\frac{3}{6}-\frac{2}{6}$

$=\frac{1}{6}$

Ans: $\frac{1}{6}$

(4) Solution: $\frac{3}{8}-\frac{1}{4}$

$=\frac{6}{8}-\frac{2}{8}$

$=\frac{4^{1}}{8_{2}}$

$=\frac{1}{2}$

Ans: $\frac{1}{2}$

(2) Solution: $\frac{1}{4}-\frac{1}{5}$

$=\frac{5}{20}-\frac{4}{20}$

$=\frac{1}{20}$

Ans: $\frac{1}{20}$

(3) Solution: $\frac{2}{3}-\frac{2}{5}$

$=\frac{10}{15}-\frac{4}{15}$

$=\frac{\cancel{6}^{\,2}}{\cancel{15}_{\,5}}$

$=\frac{2}{5}$

Ans: $\frac{2}{5}$

(5) Solution: $\frac{5}{6}-\frac{3}{8}$

$=\frac{20}{24}-\frac{9}{24}$

$=\frac{11}{24}$

Ans: $\frac{11}{24}$

(6) Solution: $\frac{7}{10}-\frac{4}{15}$

$=\frac{21}{30}-\frac{8}{30}$

$=\frac{13}{30}$

Ans: $\frac{13}{30}$

Note 3 **Do addition and subtraction.**

Solution:

(1) Solution: $\frac{1}{4}+\frac{3}{20}$

$=\frac{5}{20}+\frac{3}{20}$

$=\frac{\cancel{8}^{\,4}{}^{\,2}}{\cancel{20}_{\,10}{}_{\,5}}$

$=\frac{2}{5}$

Ans: $\frac{2}{5}$

(2) Solution: $\frac{1}{4}+\frac{7}{12}$

$=\frac{3}{12}+\frac{7}{12}$

(4) Solution: $\frac{4}{15}+\frac{1}{12}$

$=\frac{16}{60}+\frac{5}{60}$

$=\frac{\cancel{21}^{\,7}}{\cancel{60}_{\,20}}$

$=\frac{7}{20}$

Ans: $\frac{7}{20}$

(5) Solution: $\frac{8}{15}+\frac{3}{10}$

$=\frac{16}{30}+\frac{9}{30}$

$$= \frac{10^{\,5}}{12_{\,6}}$$

$$= \frac{5}{6}$$

Ans: $\frac{5}{6}$

(3) Solution: $\frac{3}{8} + \frac{1}{24}$

$$= \frac{9}{24} + \frac{1}{24}$$

$$= \frac{10^{\,5}}{24_{\,12}}$$

$$= \frac{5}{12}$$

Ans: $\frac{5}{12}$

(7) Solution: $\frac{1}{2} - \frac{1}{6}$

$$= \frac{3}{6} - \frac{1}{6}$$

$$= \frac{2^{\,1}}{6_{\,3}}$$

$$= \frac{1}{3}$$

Ans: $\frac{1}{3}$

(9) Solution: $\frac{11}{12} - \frac{4}{15}$

$$= \frac{55}{60} - \frac{16}{60}$$

$$= \frac{39^{\,13}}{60_{\,20}}$$

$$= \frac{25^{\,5}}{30_{\,6}}$$

$$= \frac{5}{6}$$

Ans: $\frac{5}{6}$

(6) Solution: $\frac{11}{14} - \frac{2}{7}$

$$= \frac{11}{14} - \frac{4}{14}$$

$$= \frac{7^{\,1}}{14_{\,2}}$$

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

Ans: $\frac{1}{2}$

(8) Solution: $\frac{5}{6} - \frac{7}{18}$

$$= \frac{15}{18} - \frac{7}{18}$$

$$= \frac{8^{\,4}}{18_{\,9}}$$

$$= \frac{4}{9}$$

Ans: $\frac{4}{9}$

(10) Solution: $\frac{13}{15} - \frac{9}{20}$

$$= \frac{52}{60} - \frac{27}{60}$$

$$= \frac{25^{\,5}}{60_{\,12}}$$

$= \frac{13}{20}$

Ans: $\frac{13}{20}$

$= \frac{5}{12}$

Ans: $\frac{5}{12}$

Note 4 **Do addition and subtraction.**

Solution:

(1) Solution: $\frac{1}{6} + \frac{1}{3} + \frac{1}{4}$

$= \frac{2}{12} + \frac{4}{12} + \frac{3}{12}$

$= \frac{9}{12}^{3}$

$= \frac{3}{4}$

Ans: $\frac{3}{4}$

(2) Solution: $1 - \frac{1}{2} - \frac{1}{4}$

$= \frac{4}{4} - \frac{2}{4} - \frac{1}{4}$

$= \frac{1}{4}$

Ans: $\frac{1}{4}$

Exercise (2)

2. Do addition.

Solution:

(1) Solution: $\frac{1}{4} + \frac{1}{2}$

$= \frac{1}{4} + \frac{2}{4}$

$= \frac{3}{4}$

Ans: $\frac{3}{4}$

(2) Solution: $\frac{2}{5} + \frac{3}{7}$

(3) Solution: $\frac{1}{6} + \frac{3}{8}$

$= \frac{4}{24} + \frac{9}{24}$

$= \frac{13}{24}$

Ans: $\frac{13}{24}$

(5) Solution: $\frac{2}{9} + \frac{5}{12}$

$= \frac{14}{35} + \frac{9}{35}$

$= \frac{23}{35}$

Ans: $\frac{23}{35}$

(4) Solution: $\frac{3}{7} + \frac{1}{3}$

$= \frac{9}{21} + \frac{7}{21}$

$= \frac{16}{21}$

Ans: $\frac{16}{21}$

(6) Solution: $\frac{5}{6} + \frac{1}{10}$

$= \frac{25}{30} + \frac{7}{30}$

$= \frac{32}{30} = \frac{16}{15}$

$= \frac{16}{15}$

Ans: $\frac{16}{15}$

(9) Solution: $\frac{4}{15} + \frac{2}{5}$

$= \frac{4}{15} + \frac{6}{15}$

$= \frac{8}{36} + \frac{15}{36}$

$= \frac{23}{36}$

Ans: $\frac{23}{36}$

(7) Solution: $\frac{2}{3} + \frac{2}{15}$

$= \frac{10}{15} + \frac{2}{15}$

$= \frac{12}{15} = \frac{4}{5}$

$= \frac{4}{5}$

Ans: $\frac{4}{5}$

(8) Solution: $\frac{1}{6} + \frac{2}{15}$

$= \frac{3}{30} + \frac{4}{30}$

$= \frac{7}{30}$

Ans: $\frac{7}{30}$

(10) Solution: $\frac{1}{6} + \frac{7}{12}$

$= \frac{2}{12} + \frac{7}{12}$

$= \frac{\cancel{10}^{2}}{\cancel{15}_{3}}$

$= \frac{2}{3}$

Ans: $\frac{2}{3}$

$= \frac{\cancel{9}^{3}}{\cancel{12}_{4}}$

$= \frac{3}{4}$

Ans: $\frac{3}{4}$

3. Do subtraction.

Solution:

(1) Solution: $\frac{1}{3} - \frac{1}{4}$

$= \frac{4}{12} - \frac{3}{12}$

$= \frac{1}{12}$

Ans: $\frac{1}{12}$

(2) Solution: $\frac{5}{6} - \frac{2}{5}$

$= \frac{25}{30} - \frac{12}{30}$

$= \frac{13}{30}$

Ans: $\frac{13}{30}$

(3) Solution: $\frac{1}{3} - \frac{1}{6}$

$= \frac{2}{6} - \frac{1}{6}$

$= \frac{1}{6}$

Ans: $\frac{1}{6}$

(4) Solution: $\frac{4}{9} - \frac{1}{6}$

$= \frac{8}{18} - \frac{3}{18}$

$= \frac{5}{18}$

Ans: $\frac{5}{18}$

(5) Solution: $\frac{11}{12} - \frac{7}{9}$

$= \frac{33}{36} - \frac{28}{36}$

$= \frac{5}{36}$

Ans: $\frac{5}{36}$

(6) Solution: $\frac{9}{10} - \frac{2}{5}$

$= \frac{9}{10} - \frac{4}{10}$

$= \frac{\cancel{5}^{1}}{\cancel{10}_{2}}$

$= \frac{1}{2}$

Ans: $\frac{1}{2}$

(7) Solution: $\frac{7}{12}-\frac{1}{4}$

$=\frac{7}{12}-\frac{3}{12}$

$=\frac{\cancel{4}^{\,1}}{\cancel{12}_{\,3}}$

$=\frac{1}{3}$

Ans: $\frac{1}{3}$

(8) Solution: $\frac{4}{15}-\frac{1}{6}$

$=\frac{8}{30}-\frac{5}{30}$

$=\frac{\cancel{3}^{\,1}}{\cancel{30}_{\,10}}$

$=\frac{1}{10}$

Ans: $\frac{1}{10}$

(9) Solution: $\frac{2}{3}-\frac{7}{15}$

$=\frac{10}{15}-\frac{7}{15}$

$=\frac{\cancel{3}^{\,1}}{\cancel{15}_{\,5}}$

$=\frac{1}{5}$

Ans: $\frac{1}{5}$

(10) Solution: $\frac{9}{10}-\frac{5}{6}$

$=\frac{27}{30}-\frac{25}{30}$

$=\frac{\cancel{2}^{\,1}}{\cancel{30}_{\,15}}$

$=\frac{1}{15}$

Ans: $\frac{1}{15}$

4. Do calculation.

Solution:

(1) Solution: $\frac{1}{3}+\frac{1}{4}+\frac{1}{12}$

$=\frac{12}{36}+\frac{9}{36}+\frac{3}{36}$

$=\frac{\cancel{24}^{\,\cancel{12}^{\,6}\;\;2}}{\cancel{36}_{\,\cancel{18}\;\;9\;\;3}}$

$=\frac{2}{3}$

Ans: $\frac{2}{3}$

(2) Solution: $\frac{1}{6}+\frac{1}{3}+\frac{2}{9}$

(3) Solution: $\frac{1}{2}-\frac{1}{3}-\frac{1}{9}$

$=\frac{9}{18}-\frac{6}{18}-\frac{2}{18}$

$=\frac{1}{18}$

Ans: $\frac{1}{18}$

(4) Solution: $\frac{3}{4}+\frac{3}{5}-\frac{1}{2}$

$$= \frac{3}{18} + \frac{6}{18} + \frac{4}{18}$$

$$= \frac{13}{18}$$

Ans: $\frac{13}{18}$

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

$$= \frac{13}{20}$$

Ans: $\frac{13}{20}$

5. Do calculation.

Solution:

(1) Solution: $\square + \frac{1}{5} = \frac{13}{15}$

$$or, \frac{\square}{3} = \frac{13}{15} - \frac{1}{5}$$

$$or, \frac{\square}{3} = \frac{13}{15} - \frac{3}{15}$$

$$or, \frac{\square}{3} = \frac{10^{\,2}}{15_{\,3}}$$

$$or, \frac{\square}{3} = \frac{2}{3}$$

$$or, 3 \times \square = 2 \times 3$$

$$or, \quad \square = \frac{2 \times 3}{3}$$

$$or, \quad \square = 2$$

Ans: 2

(2) Solution: : $\frac{5}{7} + \frac{\square}{5} = \frac{32}{35}$

$$or, \frac{\square}{5} = \frac{32}{35} - \frac{5}{7}$$

$$or, \frac{\square}{5} = \frac{32}{35} - \frac{25}{35}$$

$$or, \frac{\square}{5} = \frac{7^{\,1}}{35_{\,5}}$$

(3) Solution: $\frac{5}{6} - \frac{\square}{7} = \frac{23}{42}$

$$or, \frac{5}{6} - \frac{23}{42} = \frac{\square}{7}$$

$$or, \frac{\square}{7} = \frac{5}{6} - \frac{23}{42}$$

$$or, \frac{\square}{7} = \frac{35}{42} - \frac{23}{42}$$

$$or, \frac{\square}{7} = \frac{12^{\,6\,2}}{42_{\,21\,7}}$$

$$or, \frac{\square}{7} = \frac{2}{7}$$

$$or, \square \times 7 = 2 \times 7$$

$$or, \quad \square = \frac{2 \times 7^{\,1}}{7_{\,1}}$$

$$or, \square = 2$$

Ans:2

$or, \frac{\square}{5} = \frac{1}{5}$

$or, \square \times 5 = 1 \times 5$

$or, \square = \frac{1 \times \cancel{5}^{\ 1}}{\cancel{5}_{\ 1}}$

$or, \square = 1$

Ans: 1